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Hymenoptera

Frederick Smith.

Vespidæ

V.

British Museum

(Collection)

Vespidæ

Part V.

MUSÉUM D'HISTOIRE NATURELLE
BIBLIOTHÈQUE
DU LABORATOIRE
D'ENTOMOLOGIE

1857.

CATALOGUE

OF

HYMENOPTEROUS INSECTS

IN

THE COLLECTION

OF THE

BRITISH MUSEUM.

BY

FREDERICK SMITH, M.E.S.

PART V.

VESPIDÆ.

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PREFACE.

The object of the present Catalogue is to give a complete list of all the genera and species of the Solitary and Social Wasps (Vespidæ) which have been described in works, and a description of those in the British Museum which appear to be hitherto undescribed.

The letters B.M. in the margin indicate the species now contained in the Collection of the British Museum, and their absence those which are desiderata.

JOHN EDWARD GRAY.

2nd March, 1857.

M591671

CATALOGUE

OF

HYMENOPTERA.

Div. II. ACULEATA.

Tribe 3. DIPLOPTERA.

Group 1. Solitary Wasps.

Fam. 1. MASARIDÆ.

This family contains some very anomalous species of Wasps, many of them differing in various characters from the true *Vespidæ*, but in one important characteristic they correspond with the latter family,—the prothorax is always prolonged backwards to the base of the wings. The anterior pair of wings have only two submarginal cells. The genus *Paragia* differs from the rest in not having the wings folded when in repose, and in some of the species having the eyes ovate, or but very slightly emarginate.

Genus 1. PARAGIA.

Paragia, *Shuck. Trans. Ent. Soc. Lond.* ii. 81.

1. PARAGIA DECIPIENS.

Paragia decipiens, *Shuck. Trans. Ent. Soc. Lond.* ii. 82. 1. t. 8. f. 3 ♀.

Sauss. Mon. Fauss. Guêpes, 54. 1.

Hab. Australia.

MUSEUM D'HISTOIRE NATURELLE BIBLIOTHÈQUE DU LABORATOIRE D'ENTOMOLOGIE

2. Paragia tricolor. B.M.

Paragia tricolor, *Smith, Trans. Ent. Soc. Lond.* 2nd ser. i. 41. t. 5. f. 1 ♂ (nec ♀).

Paragia Smithii, *Sauss. Mon. Fauss. Guêpes*, 55. 3. t. 2. f. 1 ♀.

Hab. Australia (Adelaide).

3. Paragia Saussurii. B.M.

Paragia tricolor, *Sauss. Mon. Fauss. Guêpes*, 54. 2 ♀ (nec *Smith*).

Hab. Australia (Perth).

4. Paragia Odyneroides. B.M.

Paragia Odyneroides, *Smith, Trans. Ent. Soc. Lond.* 2nd ser. i. 42. t. 5. f. 2 ♀.

Sauss. Mon. Fauss. Guêpes, 56. 4.

Hab. Australia (Hunter River).

5. Paragia Australis.

Paragia Australis, *Sauss. Ann. Soc. Ent. Fr.* 3rd ser. i. Bull. p. 21; *Mon. Fauss. Guêpes*, 57. 5 ♂ ♀. t. 2. f. 2 ♂.

Hab. Tasmania. (Coll. M. Saussure.)

6. Paragia bicolor.

Paragia bicolor, *Sauss. Ann. Soc. Ent. Fr.* 3rd ser. i. Bull. p. 21 (1853); *Mon. Fauss. Guêpes*, 58. 6. t. 2. f. 3 ♂.

Hab. Australia. (Paris Museum.)

7. Paragia bidens. B.M.

Paragia bidens, *Sauss. Mon. Fauss. Guêpes*, 59. 7 ♂ ♀.

Hab. Adelaide.

The male only in the Collection of the British Museum.

8. Paragia prædator. B.M.

Paragia prædator, *Sauss. Mon. Fauss. Guêpes*, 59. 8 ♀.

Hab. Australia.

9. Paragia pictifrons. B.M.

Female. Length 5½ lines.—Black: the head and thorax closely covered with large confluent punctures; the anterior margin of the clypeus truncated, and having a minute tubercle in the middle; the mandibles obtusely subdentate at their apex; the inner orbit of the eyes notched, the notch orange, and a waved orange band crossing the forehead between the notches; an orange line on the lateral margins of the clypeus; the scape

ferruginous, the flagellum indistinctly so beneath. A narrow orange line on the posterior margin of the prothorax, an oblique line emanating from it and uniting with a large yellow spot beneath the wings; the posterior margin of the scutellum, the sides of the metathorax, the tegulæ, and two minute oblong spots on the mesothorax, near the basal margin of the scutellum, orange; the legs pale ferruginous, dashed with yellow; the wings fusco-hyaline, with a dark cloud occupying the marginal and first submarginal cells. The basal segment of the abdomen with a narrow yellow fascia on its posterior margin; the third segment yellow, with a semicircular transverse black spot at the base; the fourth segment yellow, with a transverse black stripe at the base, broadly emarginate on its posterior margin and not extending to the lateral margins of the segment; the fifth segment yellow, with a black spot on each side at the base; the sixth yellow; the abdomen pale ferruginous beneath, with an indistinct yellow transverse band on the third and fourth segments.

Hab. Australia (Swan River).

Genus 2. CERAMIUS.

Ceramius, *Latr. Consid. gén.* (1810).
Gnatho, *Klug, Mag. Nat. Freunde* (nec *Illig. Coleopt.*) (1810).

1. Ceramius Fonscolombii. B.M.

Ceramius Fonscolombii, *Klug, Ent. Monogr.* 229. 3 ♂.
Boyer de Fonsc. Ann. Soc. Ent. Fr. 1st ser. iv. 421. t. 10. f. A ♂.
St. Farg. Hym. ii. 590. 1.
Sauss. Mon. Fauss. Guêpes, 62. 1 ♂ ♀.

Hab. South of Europe.

2. Ceramius Oraniensis.

Ceramius Oraniensis, *St. Farg. Hym.* ii. 591. 2 ♂ ♀.
Lucas, Explo. Sc. Algér. iii. 225.
Sauss. Mon. Fauss. Guêpes, 65. 2.

Hab. Algeria.

3. Ceramius Capensis.

Ceramius Capensis, *Sauss. Mon. Fauss. Guêpes,* div. 2. 66. 3. t. 3. f. 3 ♀.

Hab. Cape of Good Hope. (Coll. M. Guérin-Méneville.)

4. Ceramius spiricornis.

Ceramius (Paraceramius) spiricornis, *Sauss. Mon. Fauss. Guêpes,* div. 2. 67. 4. t. 3. f. 5 ♂.

Hab. Central Europe; Spain. (Paris Museum.)

5. Ceramius Lusitanicus.

Ceramius (Paraceramius) lusitanicus, *Klug, Entom. Monogr.* 230 ♂.
Sauss. Mon. Fauss. Guêpes, 69. 5. div. 2. t. 3. f. 6 ♂.

Hab. Middle of France; Spain. (Coll. Dr. Sichel.)

6. Ceramius nigripennis.

Ceramius (Paraceramius) nigripennis, *Sauss. Mon. Fauss. Guêpes,* div. 2. 69. 6. t. 3. f. 4 ♀.

Hab. Cape of Good Hope. (Coll. The Marquis Spinola.)

7. Ceramius linearis.

Ceramius (Paraceramius) linearis, *Klug, Entom. Monogr.* 227. 2.
Sauss. Mon. Fauss. Guêpes, div. 2. 71. 7 ♂.

Hab. Cape of Good Hope.

8. Ceramius cerceriformis.

Ceramius (Ceramoides) cerceriformis, *Sauss. Mon. Fauss. Guêpes,* div. 3. 72. 8. t. 4. f. 1 ♂.

Hab. Cape of Good Hope. (Coll. M. Guérin-Méneville.)

9. Ceramius Lichtensteinii. B.M.

Gnatho Lichtensteinii, *Klug, Mag. Gesellsch. Naturf. Freund.* iv. 38. t. 1. f. 3 ♀.
Ceramius Lichtensteinii, *Klug, Entom. Monogr.* 225. 1.
Sauss. Mon. Fauss. Guêpes, div. 4. 73. 9.

Hab. Cape of Good Hope.

10. Ceramius Rex.

Ceramius Rex, *Sauss. Mon. Fauss. Guêpes,* div. 4. 75. 10 ♀.

Hab. Cape of Good Hope. (Coll. The Marquis Spinola.)

11. Ceramius Caffer.

Ceramius Caffer, *Sauss. Mon. Fauss. Guêpes,* div. 4. 76. 11.

Hab. Cape of Good Hope. (Coll. The Marquis Spinola.)

12. Ceramius macrocephalus.

Ceramius macrocephalus, *Sauss. Mon. Fauss. Guêpes,* div. 4. 76. 12. t. 3. f. 2 ♀.

Hab. Cape of Good Hope. (Coll. The Marquis Spinola.)

13. Ceramius consobrinus.

Ceramius consobrinus, *Sauss. Mon. Fauss. Guêpes*, div. 4. 77. 13 ♀.
Hab. Cape of Good Hope. (Coll. The Marquis Spinola.)

14. Ceramius Vespiformis.

Ceramius vespiformis, *Sauss. Mon. Fauss. Guêpes*, div. 4. 79. 14 ♀.
Hab. Cape of Good Hope. (Coll. The Marquis Spinola.)

Genus 3. MASARIS.

Masaris, *Fabr. Ent. Syst.* ii. 283 (1793).

1. Masaris Vespiformis.

Masaris Vespiformis, *Fabr. Ent. Syst.* ii. 283. 1; *Syst. Piez.* 292. 1.
Coqueb. Illustr. Icon. t. 15. f. 4 ♂.
Latr. Ins. iii. 368; *Hist. Crust. et Ins.* xiii. t. 102. f. 8; *Encycl. Méth.* t. 383. f. 7, 8; *Gen. Crust. et Ins.* iv. 144.
St. Farg. Hym. ii. 589. 1.
Schaum, Ann. Soc. Ent. Fr. 3rd ser. i. 653. t. 20. f. 1 ♂ ♀.
Sauss. Mon. Fauss. Guêpes, 92. 1.
Erynnis Romandii, *Sauss. Ann. Soc. Ent. Fr.* 2nd ser. x. Bull. xix. ♀.

Hab. Barbary.

2. Masaris Spinolæ.

Masaris Spinolæ, *Sauss. Mon. Fauss. Guêpes*, 95. 2 ♀.

Hab. Cape of Good Hope.

Genus 4. TRIMERIA.

Erynnis, *Sauss. Ann. Soc. Ent. Fr.* 3 ser. i. *Bull.* p. 22.
Trimeria, *Sauss. Mon. Fauss. Guêpes*, 81.

1. Trimeria Americana.

Erynnis Americana, *Sauss. Ann. Soc. Ent. Fr.* 3 ser. i. *Bull.* p. 22.
Trimeria Americana, *Sauss. Mon. Fauss. Guêpes*, 81. 1. t. 4. f. 2, 2 *a*, 2 *b* ♀.

Hab. Brazil.

Genus 5. JUGURTIA.

Celonites, *St. Farg. Hym.* ii. 586 (1841).
Jugurtia, *Sauss. Mon. Fauss. Guêpes*, 83 (1854).

1. Jugurtia Oraniensis.

Celonites Oraniensis, *St. Farg. Hym.* ii. 586. 2 ♂.
Lucas, Explo. Sc. Algér. iii. 227. t. 10. f. 12.
Dufour, Ann. Soc. Ent. Fr. 2nd ser. ix. 58. t. 3. f. 1 ♀ ♂.
Jugurtia Oraniensis, *Sauss. Mon. Fauss. Guêpes*, 84. 1 ♂ ♀.

Hab. Algeria (Oran).

2. Jugurtia Numida.

Jugurtia Numida, *Sauss. Mon. Fauss. Guêpes*, 85. 2. t. 5. f. 3 ♂.

Hab. Algeria. (Paris Museum.)

Genus 6. CELONITES.

Vespa, pt., *Villers, Entom.* iii. 281 (1789).
Chrysis, pt., *Rossi, Faun. Etrus.* ii. 77 (1790).
Cimbex, pt., *Oliv. Encycl. Méth.* v. 772 (1790).
Celonites, *Latr. Hist. Nat. Ins.* xiii. (1804).
Masaris, *Jurine, Hym.* (1807).

1. Celonites abbreviatus. B.M.

Vespa abbreviatus, *Villers, Entom.* iii. 281. 38.
Chrysis dubia, *Rossi, Faun. Etrus.* ii. 77. t. 7. f. 10, 11.
Cimbex vespiformis, *Oliv. Encycl. Méth.* v. 772. 16.
Masaris apiformis, *Panz. Faun. Germ.* 79. 19.
Jurine, Hym. t. 10. f. 17.
Celonites apiformis, *Spin. Ins. Ligur.* i. 90.
Latr. Hist. Crust. et Ins. xiii. 354; *Gen. Crust. et Ins.* iv. 144.
Guér. Icon. Règ. Anim. t. 72. f. 1.
St. Farg. Hym. ii. 587. 3.
Celonites abbreviatus, *Sauss. Mon. Fauss. Guêpes*, 88. 1.

Hab. France; Germany; Switzerland; Italy; Algeria.

2. Celonites Fischeri.

Celonites Fischeri, *Spin. Ann. Soc. Ent. Fr.* vii. 505 (1838).
St. Farg. Hym. ii. 585. 1.
Lucas, Explo. Sc. Algér. iii. 226. t. 10. f. 11.
Sauss. Mon. Fauss. Guêpes, 89. 2.

Hab. Egypt; Algeria.

3. Celonites Savignyi.

Celonites Savignyi, *Sauss. Mon. Fauss. Guêpes*, 91. 3.

This species is figured in the "Description of Egypt," by Savigny, Hymenoptera, plate 9. fig. 19. ♂ & ♀. The details are those of a species distinct from the two former. See Saussure's Monograph.

Hab. Egypt.

4. Celonites Cyprius.

Celonites Cyprius, *Sauss. Mém. Soc. Phys. Genève*, xiv. 4. 1.

Hab. Cyprus.

Fam. 2. EUMENIDÆ, *Westw.*

The anterior wings folded longitudinally, having three submarginal cells and two recurrent nervures; the eyes reniform, lateral, and extending to the base of the mandibles; the anterior and intermediate tibiæ armed with one spine at their apex, the posterior tibiæ with two spines; the claws of the tarsi bifid.

Genus 1. RAPHIGLOSSA.

Raphiglossa, *Saunders, Trans. Ent. Soc. Lond.* n. s. i. 72 (1851).

1. Raphiglossa Eumenoides. B.M.

Raphiglossa Eumenoides, *Saund. Trans. Ent. Soc. Lond.* n. s. i. 72. t. 6. f. 4 ♂ ♀.
Sauss. Mon. Guêpes Sol. 2. 1.

Hab. Albania.

2. Raphiglossa Zethoides.

Raphiglossa Zethoides, *Sauss. Mon. Guêpes Sol.* 3. 2 ♂.

Hab. Algeria.

3. Raphiglossa filiformis.

Raphiglossa filiformis, *Sauss. Mon. Guêpes Sol.* 3. 3. t. 8. f. 1 (male only).

Hab. Algeria?

4. Raphiglossa symmorpha.

Raphiglossa symmorpha, *Sauss. Mon. Guêpes Sol. Supp.* 114 ♀.

Hab. Algeria.

5. Raphiglossa Natalensis. B.M.

Female. Length 6½ lines.—Black: the head and thorax strongly and closely punctured; the head subquadrate, very convex; the clypeus widely emarginate in front, with a small tubercle in the middle; the mandibles very stout, quadridentate and slightly ferruginous near their apex; the scape and basal half of the flagellum ferruginous. The thorax transverse in front, with the lateral angles produced and acute, the margin of a reddish-yellow as well as the posterior margin of the prothorax; the tubercles, tegulæ, extreme apex of the metathorax at the insertion of the petiole of the abdomen, and the legs, ferruginous; the coxæ black; the wings subhyaline, the anterior pair with a fuscous stain along their anterior margin. Abdomen: the petiole elongate, with a minute tubercle on each side about the middle; the apex yellow; the second segment with a narrow pale yellow band on its apical margin which is continued beneath the abdomen; above, the band is slightly emarginate on each side—beneath, it is notched on each side and widened in the middle; a pale spot in the middle of the apical margins of the third and fourth segments above.

Hab. Port Natal.

Genus 2. STENOGLOSSA.

Raphiglossa, *Saund. Trans. Ent. Soc. Lond.* n. s. i. 72 (1851).
Stenoglossa, *Sauss. Mon. Guêpes Sol.* 4 (1852).

1. Stenoglossa Odyneroides. B.M.

Raphiglossa odyneroides, *Saund. Trans. Ent. Soc. Lond.* n. s. i. 72. t. 6. f. 2, 3.
Stenoglossa odyneroides, *Sauss. Mon. Guêpes Sol.* 5. 1. t 2. f. 2.

Hab. Albania.

Genus 3. GAYELLA.

Gayella, *Spin. Faun. Chili*, vi. (1854).

1. Gayella Eumenoides.

Gayella Eumenoides, *Spin. Faun. Chili*, vi. t. 2. f. 2.
Sauss. Mon. Guêpes Sol. 6. 1. t. 8. f. 4 ♀.

Hab. Chili.

2. Gayella Mutilloides. B.M.

Gayella Mutilloides, *Sauss. Mon. Guêpes Sol. Supp.* 114. 1 ♀.
Hab. Chili.

Genus 4. ELIMUS.

Elimus, *Sauss. Mon. Guêpes Sol.* 7 (1852).

1. Elimus Australis.

Elimus Australis, *Sauss. Mon. Guêpes Sol.* 8. 1. t. 8. f. 3 ♂.
Hab. Australia. (Coll. J. O. Westwood, Esq.)

Genus 5. SMITHIA.

Smithia, *Sauss. Rev. et Mag. de Zool.* 371 (1855).

1. Smithia Natalensis. B.M.

Smithia Natalensis, *Sauss. Rev. et Mag. de Zool.* 371 (1855).
Hab. Port Natal.

Genus 6. ZETHUS.

Vespa, pt., *Fabr. Ent. Syst. Supp.* 263. 86 (1798).
Zethus, *Fabr. Syst. Piez.* 282. 51 (1804).
Eumenes, pt., *Latr. Hist. Nat.* xii.
Polistes, pt., *Fabr. Syst. Piez.* 269 (1804).
Didymogastra, *Spin. Mem. Accad. Torino*, xiii. 80 (1850).
Epipona, pt., *Spin. Faun. Chili*, vi. (1854).
Calligaster, *Sauss. Mon. Guêpes Sol.* 23. 2 (1852).

Div. I.—*Species of Java.*

1. Zethus cyanopterus.

Calligaster cyanoptera, *Sauss. Mon. Guêpes Sol.* 23. 2 ♀.
Zethus cyanopterus, *Sauss. Supp. Mon. Guêpes Sol.* 115.
Hab. Java.

Div. II.—*Species of Africa.*

2. Zethus? pubescens. B.M.

Female. Length 6–6¼ lines.—Black, and covered with a thin short cinereous pubescence; the mandibles, scape, and apical joint of the antennæ beneath, ferruginous; the head and thorax closely and strongly punctured; the tegulæ and legs ferruginous, the posterior tibiæ and tarsi obscurely so; the wings iridescent,

subhyaline, and with a fuscous stain along the anterior margin of the superior pair. The petiole of the abdomen elongate and cylindrical, the apex of the abdomen ferruginous.

Hab. Port Natal.

This insect may, when more specimens can be obtained, and the parts of the mouth examined, prove not to belong to the genus *Zethus*, and it is placed there with a doubt; it is represented by a single example in the Collection.

Div. III.—*Species of South America.*

3. Zethus Brasiliensis.

Zethus Brasiliensis, *Sauss. Mon. Guêpes Sol.* 10. 2 ♀.

Hab. Brazil.

4. Zethus chalybeus.

Zethus chalybeus, *Sauss. Mon. Guêpes Sol.* 10. 3 ♀.

Hab. Brazil.

5. Zethus carbonarius. B.M.

Female. Length 17 lines.—Shining jet-black, except the flagellum, which is fulvous beneath, obscurely so at the base; the clypeus finely striated longitudinally, and covered with distant shallow punctures; above the clypeus the head is finely punctured. The thorax finely punctured, the metathorax with a fine short silky cinereous pubescence; the posterior legs within and the tarsi have a similar pubescence; the wings brown, darkest along the anterior margin of the superior pair. The dilatation of the petiole of the abdomen nearly ovate, and as well as the second segment, impunctate; the apical edge of the membrane of the second segment yellow; the following segments with shallow punctures; the abdomen punctured beneath, except the petiole and the base of the second segment.

Hab. Brazil (the Amazons). (Coll. H. W. Bates.)

6. Zethus magnus.

Zethus magnus, *Sauss. Mon. Guêpes Sol.* 11. 4. t. 8. f. 5 ♂.

Hab. Brazil.

7. Zethus lugubris. B.M.

Zethus lugubris, *Perty, Del. Anim. Art.* 144. t. 28. f. 4.
Sauss. Mon. Guêpes Sol. 11. 5 ♂ ♀.

Hab. Brazil.

8. Zethus Mexicanus.

Vespa Mexicana, *Linn. Syst. Nat.* i. 953. 6.
Tigny, Hist. Ins. iii. 579.
Vespa recurvirostris, *De Geer, Mém. Ins.* iii. 579. t. 29. f. 4–6.
Zethus cyanipennis, *Fabr. Ent. Syst.* ii. 277. 86.
Polistes cyanipennis, *Fabr. Syst. Piez.* 275. 30.
Coqueb. Illustr. Icon. Ins. dec. i. t. 6. f. 4.
Vespa mexicana, *Oliv. Encycl.* vi. 673.
Eumenes cyanipennis, *Latr. Hist. Nat. Ins.* xii. 345.
Zethus cyanipennis, *Latr. Hist. Crust. et Ins.* iv. 138.
Erichs. Faun. et Flo. Brit. Guiana, iii. 590.
Sauss. Mon. Guêpes Sol. 12. 6.

Hab. South America; Cayenne.

9. Zethus ferrugineus. B.M.

Zethus ferrugineus, *Sauss. Mon. Guêpes Sol.* 14. 10 ♀.

Hab. South America; Brazil (Para).

10. Zethus pallidus.

Female. Length 6½ lines.—Pale testaceous yellow: the head, mesothorax above, the apical margin of the scutellum, and a longitudinal stripe on the petiole of the abdomen, black; the antennæ, mandibles, clypeus, and a transverse line above it, testaceous-yellow. The head and thorax with a thin golden-yellow pubescence, that on the metathorax and abdomen is more dense and longer, coarsely punctured; the wings subhyaline, the superior pair with a yellow stain on their anterior margin; beyond the stigma the margin is slightly fuscous; the mesothorax with two longitudinal yellow stripes; the central suture of the metathorax black. Abdomen: the apical margin of the second segment with a deep groove a little within, the margin itself much elevated.

Hab. Brazil. (Coll. F. Smith.)

11. Zethus sculpturalis.

Male. Length 6–7 lines.—Black: the clypeus with large distant shallow punctures; the head above the antennæ coarsely longitudinally rugose; the anterior margin of the clypeus and a small ovate spot at the insertion of the antennæ yellow. Thorax: the prothorax transversely and coarsely rugose before the tegulæ, the mesothorax and scutellum longitudinally so; the metathorax, sides of the thorax, and the clypeus covered with cinereous pubescence; the prothorax with a deep transverse channel in

front, the anterior margin elevated; a spot on the tegulæ behind, and the posterior margin of the scutellum, yellow; the wings fusco-hyaline; the anterior femora yellow at their apex outside, and the tibiæ also with a yellow stripe outside; the claw-joint of the tarsi rufo-testaceous. Abdomen: the apex of the petiole, and the second and third segments with a narrow yellow fascia; the margins of the following segments testaceous; the second segment of an obscure reddish-brown.

Hab. Brazil (Ega on the Amazons). (Coll. H. W. Bates.)

This species is closely allied to *Zethus cinerascens* of Saussure; the sex described is not indicated.

12. Zethus fraternus. B.M.

Zethus fraternus, *Sauss. Mon. Guêpes Sol.* 16. 14 ♂.

Hab. Brazil.

13. Zethus lobulatus. B.M.

Zethus lobulatus, *Sauss. Mon. Guêpes Sol. Supp.* 116. 2. t. 6. f. 4, 4 *a* ♀.

Hab. Brazil (Amazons).

14. Zethus cinerascens.

Zethus cinerascens, *Sauss. Mon. Guêpes Sol. Supp.* 117. 3.

Hab. Brazil.

15. Zethus parvulus.

Zethus parvulus, *Sauss. Mon. Guêpes Sol. Supp.* 119. 5. t. 6. f. 1 ♀.

Hab. Brazil.

16. Zethus geniculatus.

Didymogastra geniculata, *Spin. Mem. Accad. di Torino*, ser. 2. xiii. 80. 61.

Zethus geniculatus, *Sauss. Mon. Guêpes Sol. Supp.* 120. 6 ♂ ♀.

Hab. Para.

17. Zethus Hilarinus.

Zethus Hilarinus, *Sauss. Mon. Guêpes Sol. Supp.* 120. 7. t. 6. f. 6 ♀.

Hab. Brazil.

18. ZETHUS AURULENS.

Zethus aurulens, *Sauss. Mon. Guêpes Sol. Supp.* 121. 8. t. 6. f. 5 ♂.

Hab. Brazil.

19. ZETHUS DUBIUS. B.M.

Female. Length 5½ lines.—Black: the head, thorax and petiole closely and strongly punctured; a minute spot above the insertion of each antenna, and a similar spot behind the eyes, yellow; the anterior margin of the clypeus slightly emarginate in the middle. A line on the anterior margin of the prothorax laterally, a minute spot behind the tegulæ, one on each side of the scutellum, a transverse line on the post-scutellum, from the lateral angles of which a line runs down the metathorax to the insertion of the abdomen, yellow. A minute spot at the apex of the femora behind, another at the base of the tibiæ outside, the intermediate femora with a stripe beneath, and a narrow line on the tibiæ outside, yellow; the wings subhyaline, the anterior margin of the superior pair fuscous. The dilated portion of the petiole of the abdomen elongate-ovate, the apex with a yellow band; the apical margin of the following segments with narrow yellow bands.

The male differs in having the clypeus yellow and in having the anterior margin of the prothorax entirely yellow; otherwise resembling the female.

Hab. Brazil (Villa Nova). (Coll. H. W. Bates.)

20. ZETHUS CARINATUS. B.M.

Male. Length 4 lines.—Black: the head, thorax, and petiole of the abdomen coarsely punctured, a longitudinal carina extending the entire length of the dilated portion, which is elongate and cylindrical. The clypeus, a minute spot in the emargination of the eyes, another above the insertion of each antenna, the scape in front, and a stripe on the mandibles, yellow; the anterior margin of the clypeus truncate in the middle. The anterior margin of the prothorax, a minute spot on each side of the scutellum and post-scutellum, and two longitudinal lines on the metathorax, running down to the insertion of the abdomen, yellow; the anterior and intermediate tibiæ outside, and the intermediate femora at their apex in front, yellow; the anterior tarsi rufo-fuscous; the wings subhyaline, the superior pair faintly clouded at their anterior margin. The apex of the petiole of the abdomen, and the apical margins of the segments with narrow yellow bands.

Hab. Brazil (Villa Nova). (Coll. H. W. Bates.)

21. Zethus fuscus.

Didymogastra fusca, *Perty, Del. Anim. Art.* p. 145. t. 28. f. 5 ♀.
Zethus fuscus, *Sauss. Mon. Guêpes Sol.* 19. 21.

Hab. Brazil (Amazons).

22. Zethus Smithii.

Zethus Smithii, *Sauss. Mon. Guêpes Sol. Supp.* 122. 9 ♀.

Hab. ——? South America or Java. (Coll. F. Smith.)

23. Zethus cæruleopennis.

Vespa cæruleopennis, *Fabr. Ent. Syst. Supp.* 263. 86-7.
Zethus cæruleopennis, *Fabr. Syst. Piez.* 282. 1.
Latr. Gen. Crust. et Ins. iv. 137. 138. t. 14. f. 4; *Encycl.* t. 393. f. 12 & 13.
Coqueb. Illustr. Icon. Ins. dec. i. t. 6. f. 4.
Sauss. Mon. Guêpes Sol. 9. 1 ♂ ♀.

Hab. Cayenne; Para.

24. Zethus gigas. B.M.

Zethus gigas, *Spin. Ann. Soc. Ent. Fr.* x. 129. 1 ♀ (1841).
Sauss. Mon. Guêpes Sol. 12. 7 ♂ ♀.
Calligaster Hero, *de Haan, MSS.*
Sauss. Mon. Guêpes Sol. 23. 1.

Hab. Cayenne.

25. Zethus biglumis.

Zethus biglumis, *Spin. Ann. Soc. Ent. Fr.* x. 135 ♀ (1841).
Sauss. Mon. Guêpes Sol. 19. 20.

Hab. Cayenne.

26. Zethus pyriformis.

Zethus pyriformis, *Spin. Ann. Soc. Ent. Fr.* x. 135. 1.
Sauss. Mon. Guêpes Sol. 15. 12. t. 8. f. 8 ♀.

Hab. Cayenne.

27. Zethus Romandinus.

Zethus Romandinus, *Sauss. Mon. Guêpes Sol.* 20. 22. t. 9. f. 1 ♂.

Hab. Cayenne.

28. Zethus binodis. B.M.

Vespa binodis, *Fabr. Ent. Syst. Supp.* 264. 100–1 ♀.
Coqueb. Illustr. Icon. Ins. dec. ii. t. 15. f. 2.
Eumenes binodis, *Fabr. Syst. Piez.* 287. 8.
Zethus didymogaster, *Spin. Ann. Soc. Ent. Fr.* x. 133 (1841).
Zethus binodis, *Sauss. Mon. Guêpes Sol.* 20. 23.

Hab. Cayenne.

29. Zethus niger. B.M.

Zethus niger, *Sauss. Mon. Guêpes Sol.* 21. 24. t. 8. f. 9 ♂.

Hab. Cayenne.

30. Zethus arietis.

Vespa arietis, *Fabr. Ent. Syst.* ii. 282. 101 ♂.
Polistes arietis, *Fabr. Syst. Piez.* 280. 50.
Vespa arietis, *Oliv. Encycl. Méth.* vi. 676.
Zethus arietis, *Sauss. Mon. Guêpes Sol.* 14. 11.

Hab. South America.

31. Zethus Jurinei. B.M.

Zethus Jurinei, *Sauss. Mon. Guêpes Sol.* 15. 13 ♂.

Hab. South America; St. Domingo.

32. Zethus albopictus. B.M.

Female. Length 4¾ lines.—Black: the head subopake and finely rugose; the scape shining; the flagellum opake and slightly ferruginous at its apex beneath; an oblong yellow spot on the lateral margins of the clypeus. The mesothorax slightly shining and covered with fine shallow punctures; the sides of the thorax and also beneath covered with a fine, short, silky, white pubescence; the anterior margin of the thorax, a spot beneath the wings, two spots on the tegulæ, an interrupted line on the posterior margin of the scutellum, a minute one on each side of the post-scutellum, and a line on the tibiæ outside, white; the wings fusco-hyaline, with a dark cloud on the anterior margin of the superior pair. Abdomen: the posterior margin of the petiole, a narrow band towards the base of the first segment, another on its apical margin, and a similar band on the apical margin of the third segment, white; the white band continued beneath on the apical margin of the first segment.

Hab. St. Domingo.

33. Zethus discoelioides.

Zethus discoelioides, *Sauss. Mon. Guêpes Sol.* 17. 17 ♀.

Hab. South America; Brazil (Para).

34. Zethus miscogaster.

Zethus miscogaster, *Sauss. Mon. Guêpes Sol.* 18. 18 ♀.

Hab. ——? (Museum of Geneva.)

35. Zethus dicomboda.

Epipona dicomboda, *Spin. Faun. Chili*, vi. 250.
Zethus dicomboda, *Sauss. Mon. Guêpes Sol.* 21. 25 ♂ ♀.

Hab. Chili.

Div. IV.—*Species of North America and Mexico.*

36. Zethus spinipes.

Zethus spinipes, *Say, North Amer. Hym.* 387.
Sauss. Mon. Guêpes Sol. Supp. 122. 10.

Hab. United States (Indiana).

37. Zethus bicolor. B.M.

Zethus bicolor, *Sauss. Mon. Gvêpes Sol.* 17. 16 ♂.

Hab. Florida.

38. Zethus rufinodus.

Eumenes rufinoda, *Latr. Gen. Crust. et Ins.* iv. 137. t. 14. f. 5.
Sauss. Mon. Guêpes Sol. 42. 19. t. 6. f. 3 ♀.

Hab. North America.

39. Zethus tubulifer.

Zethus tubulifer, *Sauss. Mon. Guêpes Sol.* 18. 19 ♀.

Hab. Mexico (Orizava).

40. Zethus Westwoodi.

Zethus Westwoodi, *Sauss. Mon. Guêpes Sol.* 16. 15. t. 6. f. 2 ♂.

Hab. Mexico.

41. Zethus chrysopterus.

Zethus chrysopterus, *Sauss. Mon. Guêpes Sol.* 13. 8. t. 8. f. 7 ♂.

Hab. Mexico.

42. ZETHUS VARIEGATUS.

Zethus variegatus, *Sauss. Mon. Guêpes Sol.* 13. 9 ♀.

Hab. Mexico.

43. ZETHUS GRACILIS. B.M.

Male. Length 4½ lines.—Black: the head and thorax coarsely punctured; between the antennæ a transverse ridge, from the middle of which a carina runs downwards, terminating about the middle of the clypeus; a line on the scape in front, and an obscure spot at each extremity of the ridge between the antennæ, yellow. The metathorax with a deep central longitudinal impression, the sides of which are obliquely striated; the wings hyaline and iridescent, a fuscous stain along the anterior margin of the externo-medial cell, and the apical half of the marginal cell clouded. Abdomen covered with a beautiful reflective silky pile; the apical margin of the petiole and also of the following segment with a narrow yellow fascia; the swollen portion of the petiole with large scattered punctures.

Hab. Mexico.

44. ZETHUS LÆVINODUS. B.M.

Female. Length 9 lines.—Black: the head strongly punctured, the punctures on the vertex scattered; the clypeus longitudinally rugose-striate, the striations irregular, the anterior margin rounded, slightly notched in the middle; the mandibles with deep coarse longitudinal grooves. Thorax: shining, with a few fine distant punctures above; the anterior margin of the prothorax sharply elevated, the lateral angles acute; the mesothorax with an abbreviated carina in the middle in front, and on each side with a deeply impressed longitudinal line extending from its anterior margin to the scutellum, the lines towards the scutellum parallel, but diverging towards the anterior margin; a short impressed line over the tegulæ; the metathorax opake, the sides rounded and with a deep longitudinal impression in the middle; covered with silky pubescence; a spot at the lateral angles of the prothorax, another beneath the wings, and an interrupted line on the post-scutellum, yellow; the wings dark brown, with a rich purple iridescence, the posterior wings paler. Abdomen very smooth and highly polished.

Hab. Mexico.

Genus 7. DISCOELIUS.

Vespa, pt., *Panz. Faun. Germ.* 81. 18.
Eumenes, pt., *Spin. Ins. Lig.* ii. 190 (1806–8).
Discoelius, *Latr. Gen. Cr. et Ins.* iv. (1809).
Epipona, pt., *Spin. Faun. Chili*, vi. (1854).

1. DISCOELIUS ZONALIS. B.M.

Vespa zonalis, *Panz. Faun. Germ.* 81. 18.
Eumenes zonalis, *Spin. Ins. Lig.* ii. 190.
Discoelius zonalis, *Latr. Gen. Crust. et Ins.* iv. 120.
St. Farg. Hym. ii. 603. 1.
Blanch. Règne Anim. Ill. Ins. t. 124. f. 4.
Sauss. Mon. Guêpes Sol. 26. 4 ♂ ♀.

Hab. France; Italy; Germany.

2. DISCOELIUS DUFOURII.

Discoelius Dufourii, *St. Farg. Hym.* ii 605. 2 ♀.
Sauss. Mon. Guêpes Sol. 27. 5. t. 9. f. 5.

Hab. South of France.

3. DISCOELIUS CHILIENSIS.

Epipona Chiliensis, *Spin. Faun. Chili*, vi. 248 ♀.
Discoelius Chiliensis, *Sauss. Mon. Guêpes Sol.* 25. 1. t. 9. f. 3.

Hab. Chili.

4. DISCOELIUS MERULA.

Discoelius merula, *Curtis*, *Trans. Linn. Soc.* xviii. 325.
Epipona Chiliensis (var.), *Spin. Faun. Chili*, vi. 348.
Discoelius Spinolæ, *Sauss. Mon. Guêpes Sol.* 25. 2 ♂ ♀.

Hab. Chili.

5. DISCOELIUS PULCHELLUS. B.M.

Discoelius pulchellus, *Sauss. Mon. Guêpes Sol. Supp.* 127. 15 ♂ ♀.

Hab. Mexico; Jamaica.

6. DISCOELIUS ELONGATUS.

Discoelius elongatus, *Sauss. Mon. Guêpes Sol. Supp.* 124. 11. t. 6. f. 7 ♀.

Hab. Australia.

7. DISCOELIUS SPINOSUS.

Discoelius spinosus, *Sauss. Mon. Guêpes Sol. Supp.* 125. 12 ♀.

Hab. New South Wales. (Coll. J. S. Baly, Esq.)

8. Discoelius ephippium.

Discoelius ephippium, *Sauss. Mon. Guêpes Sol. Supp.* 125. 13. t. 6. f. 8 ♀.

Hab. New Holland.

9. Discoelius insignis. B.M.

Discoelius insignis, *Sauss. Mon. Guêpes Sol. Supp.* 126. 14 ♀.

Hab. New Holland.

10. Discoelius Verreauxii.

Discoelius Verreauxii, *Sauss. Mon. Guêpes Sol.* 26. 3. t. 9. f. 4 ♀.

Hab. Tasmania.

Genus 8. EUMENES.

Vespa, pt., *Linn. Faun. Suec.* 415 (1761).
Eumenes, *Latr. Hist. Nat. Ins.* (1802).
Sphex, pt., *Christ. Hym.* 315 (1791).

Div. I.—*Species of Europe.*

1. Eumenes coarctata. B.M.

Vespa coarctata, *Linn. Syst. Nat.* i. 950 ♀, & *Cab. Mus. Linn. Soc.*
Frisch. Ins. 9. t. 9.
Fabr. Syst. Ent. 370. 39; *Spec. Ins.* i. 467. 53; *Mant. Ins.* i. 292. 65; *Ent. Syst.* ii. 276.
Villers, Ent. iii. 268.
Oliv. Encycl. Méth. 671.
Vespa pedunculata, *Panz. Faun. Germ.* 63. 8.
Vespa coronata, *Panz. Faun. Germ.* 63. 12.
Eumenes atricornis, *Curtis, Brit. Ent.* i. t. 13.
Eumenes coarctata, *Smith, Cat. Brit. Hym.* 44. 1.
Sauss. Mon. Guêpes Sol. 31. 2.

Hab. Europe.

2. Eumenes pomiformis. B.M.

Vespa pomiformis, *Rossi, Faun. Etrus.* 85. 86.
Schrank, Ins. Austr. 79.
Roes. Ins. ii. *Vesp.* t. 17. f. 8.
Geoff. Ins. ii. 376. 9.
Panz. Faun. Germ. 63. 7 ♀.
Oliv. Encycl. Méth. vi. 671.
Fabr. Ent. Syst. ii. 279.
Vespa coarctata, *Panz. Faun. Germ.* 63. 6 ♂.

Vespa dumetorum, *Panz. Faun. Germ.* 63. 4 ♀?
Eumenes arbustorum, *Schæff. Faun. Germ.* 179. 9.
Eumenes Frivaldzkyi, *Schæff. Faun. Germ.* 179. 10.
Sphex annularis, *Christ. Hym.* 315. t. 31. f. 7 ♀.
Sphex viatica, *Christ. Hym.* 315.
Sphex papillaria, *Christ. Hym.* 325. t. 32. f. 10 ♂.
Vespa viatica, *Fabr. Syst. Ent.* 20.
Eumenes pomiformis, *Fabr. Syst. Piez.* 287.
St. Farg. Hym. ii. 600. 3.
Blanch. Hym. ii. 600.
Eumenes atricornis, *Fabr. Syst. Piez.* 289.
Eumenes lunulata, *Fabr. Syst. Piez.* 290.

Hab. Europe.

3. EUMENES DUBIA.

Eumenes dubia, *Sauss. Mon. Guêpes Sol.* 32. 3 (var. E. pomiformis?).

Hab. Centre of France.

4. EUMENES BIPUNCTIS.

Eumenes bipunctis, *Sauss. Mon. Guêpes Sol.* 33. 4. t. 11. f. 7 ♀.

Hab. Europe.

5. EUMENES HUBERTI.

Eumenes Huberti, *Sauss. Mon. Guêpes Sol.* 33. 5. t. 11. f. 6 (var. E. unguiculus ♂?).

Hab. France (Bordeaux).

6. EUMENES DIMIDIATA. B.M.

Eumenes dimidiata, *Brullé, Expéd. Sc. de Morée*, 361.
Vespa pomiformis, *Panz. Faun. Germ.* 63. 7.
Eumenes Amedei, *St. Farg. Hym.* ii. 597.
Lucas, Explo. Sc. d'Algér. iii. 227. t. 11. f. 1 ♀.
Sauss. Mon. Guêpes Sol. 34. 6.

Hab. France (Montpellier); Algeria (Oran).

7. EUMENES UNGUICULA. B.M.

Vespa unguicula, *Villers, Ent.* 40.
Eumenes conica, *Rossi, Mant. Ins.* 135. 299.
Vespa coangustata, *Rossi, Faun. Etrus.* ii. 84.
Eumenes coangustata, *Schæff. Faun. Germ.* 179. t. 7.
Sulzer, Kenzeich. d. Ins. t. 19. f. *a*.

Eumenes coangustata, *Spin. Ins. Lig.* i. 82.
Sauss. Mon. Guêpes Sol. 34. 7.
Vespa infundibuliformis, *Oliv. Encycl. Méth.* vi. 672.
Sphex cursor, *Christ. Hym.* 314. t. 31. f. 6.
Sphex lapicida, *Christ. Hym.* 318. t. 32. f. 5.
Sphex coarctata, *Christ. Hym.* 320. t. 32. f. 6 ♂.
Eumenes dumetorum, *Schweizer, Ent.* fasc. 148.
Eumenes Olivieri, *St. Farg. Hym.* ii. 596. 1.
Blanch. Règne An. Illustr. Ins. t. 124. f. 1.

Hab. Europe; Algeria.

8. Eumenes Sichelii. B.M.

Eumenes Sichelii, *Sauss. Mon. Guêpes Sol.* 36. 8. t. 10. f. 2 ♀.

Hab. Albania.

9. Eumenes tripunctata.

Sphex tripunctata, *Christ. Hym.* 317. t. 32. f. 3.
Vespa trimaculata, *Weber, Obs. Entom.* 102. 6.
Eumenes venusta, *Fisch. Mag. Zool.* (1843) 1. t. 122. f. 1, 2 ♂.
Eumenes tripunctatus, *Sauss. Mon. Guêpes Sol. Supp.* 137. 21.

Hab. Russia (borders of the Ural).

10. Eumenes Picteti.

Eumenes Picteti, *Sauss. Mon. Guêpes Sol.* 67. 54. t. 12. f. 3 ♀.

Hab. Middle of France (Montpellier).

11. Eumenes Taurica.

Eumenes Tauricus, *Sauss. Mon. Guêpes Sol. Supp.* 137. 20.

Hab. Crimea.

Div. II.—*Species of India; China; Java; Philippine Islands.*

12. Eumenes affinissima.

Eumenes affinissima, *Sauss. Mon. Guêpes Sol.* 37. 9 ♂.

Hab. India.

13. Eumenes xanthura.

Eumenes xanthura, *Sauss. Mon. Guêpes Sol.* 46. 26. t. 10. f. 4 ♀.

Hab. India.

14. Eumenes circinalis. B.M.

Eumenes circinalis, *Fabr. Syst. Piez.* 286. 4.
Sauss. Mon. Guêpes Sol. 47. 27. t. 10. f. 7.

Hab. India.

15. Eumenes conica. B.M.

Vespa conica, *Fabr. Mant. Ins.* i. 293. 69; *Ent. Syst.* ii. 278. 88.
Eumenes conica, *Fabr. Syst. Piez.* 285. 2.
Sauss. Mon. Guêpes Sol. 52. 34.

Hab. India; China; Philippine Islands.

16. Eumenes esuriens. B.M.

Vespa esuriens, *Fabr. Mant. Ins.* i. 393. 75.
Oliv. Encycl. Méth. vi. 673.
Vespa pediculata, *Oliv. Encycl. Méth.* vi. 671.
Eumenes esuriens, *Fabr. Syst. Piez.* 286. 7.
Sauss. Mon. Guêpes Sol. 56. 40. t. 11. f. 2.
Eumenes gracilis, *Sauss. Mon. Guêpes Sol.* 57. 41?
Eumenes campaniformis, *Sauss. Mon. Guêpes Sol.* 55. 38.

Hab. India.

Div. III.—*Species of India, China, and East India Islands.*

17. Eumenes Edwarsii. B.M.

Eumenes Edwarsii, *Sauss. Mon. Guêpes Sol.* 60. 45. t. 11. f. 4 ♀.

Hab. India (Bombay).

18. Eumenes flavopicta. B.M.

Eumenes flavopicta. *Blanch. Dict. d'Hist. Nat. Hym.* ii. t. 11. f. 2.
Sauss. Mon. Guêpes Sol. 65. 52 ♀.
Eumenes arcuata, *Westw. Ins. Ind.* 90. t. 57. f. 3.

Hab. India.

19. Eumenes Blanchardi. B.M.

Eumenes Blanchardi, *Sauss. Mon. Guêpes Sol.* 66. 53. t. 12. f. 2 ♀.

Hab. India (Pondicherry).

20. Eumenes exigua.

Eumenes exiguus, *Sauss. Mon. Guêpes Sol. Supp.* 150. 39. t. 8. f. 4, 4 *a* ♀.

Hab. India.

21. EUMENES INDIANA. B.M.

Eumenes Indianus, *Sauss. Mon. Guêpes Sol. Supp.* 136. 19. t. 7. f. 3 ♀.

Hab. India or Africa.

22. EUMENES BREVIROSTRATA. B.M.

Eumenes brevirostratus, *Sauss. Mon. Guêpes Sol. Supp.* 136. t. 7. f. 1 ♀.

Hab. India.

23. EUMENES DEPRESSA.

Eumenes depressus, *Sauss. Mon. Guêpes Sol. Supp.* 135. 17 ♀.

Hab. India.

24. EUMENES QUADRISPINOSA.

Eumenes quadrispinosus, *Sauss. Mon. Guêpes Sol. Supp.* 134. 16. t. 7. f. 2, 2 *g* ♀.

Hab. India.

25. EUMENES SUBLÆVIS. B.M.

Female. Length 6 lines.—Black, smooth and shining: the head covered with fine shallow punctures; the clypeus, an angular spot on the mandibles at their base, the emargination of the eyes and a line behind them, a spot at the side of the posterior ocelli and a line in front of the anterior one extending to the base of the clypeus, yellow; the scape of the antennæ yellow in front, and the flagellum fulvous beneath. The thorax covered with minute shallow punctures; an interrupted transverse line on the prothorax, two longitudinal ones on the mesothorax, slightly divergent towards the head, two ovate spots on the scutellum, the tegulæ and a spot beneath the wings, a curved line on each side of the metathorax, the outer margin of which is angulated, yellow; the anterior and intermediate femora, tibiæ and tarsi yellow, the former with a dark stripe above, and the tarsi slightly ferruginous; a yellow spot on the intermediate coxæ outside; the posterior femora with a spot at their apex beneath; the wings slightly fuscous, darkest along their anterior margin. Abdomen: the first segment forming a long petiole which is finely roughened above and has a minute tooth on each side about the middle; the apical margin with a narrow yellow band; the apical margins of the second and third segments with a narrow yellow band which is interrupted on each side; the fourth segment with a

transverse yellow line in the middle of its posterior margin; a curved yellow spot on each side of the second segment beneath.

Hab. Borneo (Sarawak). (Coll. A. R. Wallace.)

26. EUMENES FULVIPENNIS. B.M.

Female. Length 12 lines.—Black, with the wings pale reddish-yellow; of the size and form of *E. arcuatus*. The head and thorax closely and rather strongly punctured, very slightly shining; the labrum brown; the clypeus has the anterior margin slightly notched; the wings, with the nervures, ferruginous; the petiole smooth and shining; the rest of the abdomen subopake; on each side of the petiole are two small indistinct pale oval spots; the legs black, with the claw-joint of the tarsi ferruginous.

The male closely resembles the female, and only differs in being rather smaller, and in having an obscure ferruginous stripe on the clypeus.

Hab. Celebes. (Coll. Madame Ida Pfeiffer.)

27. EUMENES INFLEXA.

Eumenes inflexus, *Sauss. Mon. Guêpes Sol. Supp.* 145. 33 ♀.

Hab. Probably Asiatic.

28. EUMENES PUNCTATA. B.M.

Eumenes punctata, *Sauss. Mon. Guêpes Sol.* 37. 10.

Hab. China.

29. EUMENES DECORATA. B.M.

Eumenes decoratus, *Smith, Trans. Ent. Soc. Lond.* n. ser. ii. 36. *Sauss. Mon. Guêpes Sol. Supp.* 138. 22 ♀.

Hab. North China (Tein-Tung).

30. EUMENES QUADRATA. B.M.

Eumenes quadratus, *Smith, Trans. Ent. Soc. Lond.* n. ser. ii. 37.

Hab. North China (Ning-po-Foo).

31. EUMENES IMPERATRIX.

Female. Length 10 lines.—Black: the head covered with large shallow confluent punctures; the clypeus with the basal half yellow; the scape in front, a spot between the antennæ and a line running from it up to the anterior stemma, yellow; the flagellum fulvous beneath; a narrow yellow indistinct line behind

the eyes. Thorax strongly punctured, with the scutellum and metathorax shining and less closely punctured; two yellow spots at the apex of the metathorax at the insertion of the abdomen; the anterior tibiæ in front, the claw-joint of the anterior tarsi, and the extreme apex of the intermediate and posterior femora, yellow. Abdomen: the basal segment clavate, with a transverse interrupted narrow yellow line at the extreme apex above; the second segment with a broad, deeply emarginate fascia on its apical margin.

Hab. North China.

32. EUMENES MELANOSOMA. B.M.

Eumenes melanosoma, *Sauss. Mon. Guêpes Sol.* 61. 46. t. 12. f. 1.

Hab. Java.

33. EUMENES CURVATA. B.M.

Eumenes curvatus, *Sauss. Mon. Guêpes Sol. Supp.* 145. t. 8. f. 1.

Hab. Philippine Islands.

DIV. IV.—*Species of Africa.*

34. EUMENES NIGRA.

Eumenes nigra, *Brullé, Hist. Nat. Il. Canar.* ii. 89.
Sauss. Mon. Guêpes Sol. 38. 12.
Savigny, Descr. Egypt. Hym. t. 8. f. 3 ♀?

Hab. Canary Islands: Egypt?

35. EUMENES DIMIDIATIPENNIS. B.M.

Eumenes dimidiatipennis, *Sauss. Mon. Guêpes Sol.* 51. 33.
Savigny, Descr. de l'Egypt. Hym. t. 8. f. 5.

Hab. Arabia (Djidda); Egypt; India (Punjaub).

36. EUMENES ELEGANS.

Eumenes elegans, *Sauss. Mon. Guêpes Sol.* 58. 42. t. 11. f. 3 ♀.

Hab. Arabia (Djidda); India.

37. EUMENES CONCINNA.

Eumenes concinnus, *Sauss. Mon. Guêpes Sol. Supp.* 144. 30.

Hab. Nubia.

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38. Eumenes distincta.

Eumenes distinctus, *Sauss. Mon. Guêpes Sol. Supp.* 143. 29 ♂.

Hab. Africa.

39. Eumenes macrocephala.

Eumenes macrocephala, *Sauss. Mon. Guêpes Sol.* 37. 11.

Hab. Cape of Good Hope.

40. Eumenes Caffra. B.M.

Vespa caffra, *Linn. Syst. Nat.* i. 951. 21.
Muell. Ed. Linn. Ins. ii. 885. 21.
Gmel. Ed. Linn. i. 2758. 21.
Oliv. Encycl. Méth. vi. 679.
Weber, Obs. Ent. 101. 3.
Sphex cruciata, *Christ. Hym.* 317. t. 32. f. 2.
Eumenes caffra, *Sauss. Mon. Guêpes Sol.* 45. 25.

Hab. Cape of Good Hope.

41. Eumenes petiolata. B.M.

Vespa petiolata, *Fabr. Sp. Ins.* i. 467; *Mant. Ins.* i. 292. 68; *Ent. Syst.* ii. 278. 87.
Gmel. Ed. Linn. 2753. 51.
Oliv. Encycl. Méth. ii. 670.
Eumenes petiolata, *Fabr. Syst. Piez.* 284. 1.
Latr. Ins. iii. 360.
Westw. Ins. India, 90. t. 5. f. 2.
Sphex hesperus, *Christ. Hym.* 311. t. 31. f. 3 ♀.
Sphex rubicunda, *Christ. Hym.* 316. t. 32. f. 1 ♂.
Sphex turrimurarius, *Christ. Hym.* 321. t. 32. f. 32.
Sphex thoracica, *Christ. Hym.* 321. t. 32. f. 9 ♂.
Eumenes petiolatus, *Sauss. Mon. Guêpes Sol.* 47. 28.

Hab. Cape of Good Hope.

42. Eumenes Hottentotta.

Eumenes Hottentotta, *Sauss. Mon. Guêpes Sol.* 63. 49 ♀.

Hab. Cape of Good Hope.

43. Eumenes acuminata.

Eumenes acuminatus, *Sauss. Mon. Guêpes Sol. Supp.* 147. 36. t. 8. f. 2 ♂.

Hab. Cape of Good Hope.

44. EUMENES DYSCHERA. B.M.

Eumenes dyschera, *Sauss. Mon. Guêpes Sol.* 50. 31 ♀.

Hab. Tropical Africa.

45. EUMENES TINCTOR. B.M.

Sphex tinctor, *Christ. Hym.* 341. t. 31. f. 1.
Eumenes Savignyi, *Guér. Icon. Règn. An.* 446. t. 72. f. 4.
Spin. Ann. Soc. Ent. Fr. vii. 503 (1833).
Eumenes tinctor, *Sauss. Mon. Guêpes Sol.* 49. 30.
Savigny, Descr. de l'Egypt. t. 8. f. 4.

Hab. Senegal; Congo; Egypt.

46. EUMENES TROPICA. B.M.

Eumenes tropicalis, *Sauss. Mon. Guêpes Sol.* 54. 36 ♀.

Hab. Senegal.

47. EUMENES ASINA.

Eumenes asina, *Sauss. Mon. Guêpes Sol.* 59. 43. t. 11. f. 1 ♀.

Hab. Senegal.

48. EUMENES LEPELETIERI. B.M.

Eumenes Lepeletierii, *Sauss. Mon. Guêpes Sol.* 45. 24. t. 10. f. 3 ♀.
Eumenes formosa, *Sauss. Mon. Guêpes Sol.* 56. 39.

Hab. Senegal.

49. EUMENES FENESTRALIS. B.M.

Eumenes fenestralis, *Sauss. Mon. Guêpes Sol.* 53. 35. t. 10. f. 6.

Hab. Congo; Senegal.

50. EUMENES ÆTHIOPICA. B.M.

Eumenes æthiopica, *Sauss. Mon. Guêpes Sol.* 62. 47 ♀.

Hab. Congo.

51. EUMENES LUCASIA.

Eumenes Lucasia, *Sauss. Mon. Guêpes Sol.* 68. 55 ♂.

Hab. Abyssinia.

52. EUMENES INSULARIS. B.M.

Female. Length 8 lines.—Black: the mandibles, labrum, clypeus and a spot above it, the flagellum beneath, and a narrow

line behind the eyes, ferruginous; the vertex rather finely and distantly punctured. The prothorax above, a small spot beneath the wings, an interrupted narrow line on the posterior margin of the post-scutellum, and a similar one on each side of the metathorax, ferruginous; the legs ferruginous, with the coxæ black; the thorax shining black above, finely and not closely punctured; the wings subhyaline, having a brownish tinge with a fine violet iridescence, the anterior margin of the superior pair having a dark fuscous stain. Abdomen smooth, covered with fine changeable pile; the petiole armed on each side with a short stout acute tooth, the extreme apex beneath slightly ferruginous.

Var. A narrow yellow line at the lower portion of the inner orbit of the eyes; the sides of the metathorax ferruginous.

Male.—Differs in having the clypeus and a spot above, and also a narrow line at the inner orbit of the eyes, not entering their emargination, yellow; otherwise, coloured like the variety of the female.

Hab. The Solomon Islands, or New Hebrides (*Voyage of H.M.S. Herald*).

This species is closely allied to *Eumenes Guerini* of Saussure, but the petiole is proportionably longer; it also bears a strong general resemblance to *E. xanthura*.

53. Eumenes Guerini.

Eumenes Guerini, *Sauss. Mon. Guêpes Sol.* 62. 48 ♀.

Hab. Madagascar.

54. Eumenes regina.

Eumenes regina, *Sauss. Mon. Guêpes Sol.* 49. 29. t. 10. f. 8.

Hab. Madagascar.

55. Eumenes fluctuans. B.M.

Eumenes fluctuans, *Sauss. Mon. Guêpes Sol.* 43. 22 ♀.

Hab. New Holland.

56. Eumenes bicincta. B.M.

Eumenes bicincta, *Sauss. Mon. Guêpes Sol.* 44. 23.

Hab. New Holland.

57. Eumenes Latreillei. B.M.

Eumenes Latreillei, *Sauss. Mon. Guêpes Sol.* 51. 32. t. 10. f. 5.

Hab. New Holland.

58. Eumenes philantes. B.M.

Eumenes philantes, *Sauss. Mon. Guêpes Sol.* 54. 37 ♀.

Hab. New Holland.

59. Eumenes arcuata. B.M.

Vespa arcuata, *Fabr. Syst. Ent.* 371. 40; *Spec. Ins.* i. 467; *Mant. Ins.* i. 292. 66; *Ent. Syst.* ii. 276. 83.
Oliv. Encycl. Méth. vi. 670.
Sphex arcuata, *Christ. Hym.* 312.
Eumenes arcuata, *Fabr. Syst. Piez.* 287. 11.
Sauss. Mon. Guêpes Sol. 63. 50.

Hab. New Holland; New Guinea (Triton Bay).

60. Eumenes Urvillei. B.M.

Eumenes Urvillei, *Sauss. Mon. Guêpes Sol.* 59. 44.

Hab. Coast of New Guinea (Triton Bay).

61. Eumenes Praslina. B.M.

Eumenes Praslina, *Guér. Voy. Coquille*, ii. 267. t. 9. f. 6 ♀.
Sauss. Mon. Guêpes Sol. 64. 51.

Hab. New Ireland (Port Praslin).

Div. V.—*Species of America.*

62. Eumenes Uruguayensis.

Eumenes Uruguayensis, *Sauss. Mon. Guêpes Sol. Supp.* 139. 24. t. 7. f. 6 ♀.

Hab. Brazil.

63. Eumenes consobrina.

Eumenes consobrinus, *Sauss. Mon. Guêpes Sol. Supp.* 140. 25 ♂.

Hab. Brazil.

64. Eumenes Ghilianii.

Eumenes Ghilianii, *Spin. Mem. Accad. Torino*, xiii. 81. 62 ♂.
Sauss. Mon. Guêpes Sol. Supp. 140. 26.

Hab. Brazil (Para).

65. Eumenes versicolor. B.M.

Eumenes versicolor, *Sauss. Mon. Guêpes Sol.* 71. 60 ♂.

Hab. Brazil (Santarem). (Coll. H. W. Bates.)

66. Eumenes microscopica.

Eumenes microscopica, *Sauss. Mon. Guêpes Sol.* 72. 62 ♀.

Hab. Brazil.

67. Eumenes filiformis.

Eumenes filiformis, *Sauss. Mon. Guêpes Sol. Supp.* 146. 34 ♀.

Hab. Brazil.

68. Eumenes globicollis.

Zethus globicollis, *Spin. Ann. Soc. Ent. Fr.* x. 150. t. 3. f. 6 (1841).

Eumenes globicollis, *Sauss. Mon. Guêpes Sol. Supp.* 151. 40. t. 8. f. 6, 6*a*.

Hab. Para.

69. Eumenes pusilla.

Eumenes pusillus, *Sauss. Mon. Guêpes Sol. Supp.* 149. 38.

Hab. Brazil.

70. Eumenes parvula.

Eumenes parvulus, *Sauss. Mon. Guêpes Sol. Supp.* 149. 37. t. 8. f. 5, 5*a*.

Hab. Brazil.

71. Eumenes auropilosa. B.M.

Male. Length 3 lines.—Black: the head closely punctured, the thorax coarsely so, the punctures confluent, both thinly covered with golden pile, the abdomen densely so. The clypeus slightly produced and emarginate in the middle; the scape in front and the flagellum beneath, ferruginous; a spot in the emargination of the eyes, and a line behind them, yellow. A spot on each side of the prothorax in front, another beneath the wings, the posterior margin of the prothorax, a minute spot behind the tegulæ, a narrow transverse line at the base of the scutellum, the post-scutellum, and two ovate spots on each side of the metathorax, yellow; the legs reddish-yellow, with the coxæ and base of the femora black. The wings subhyaline and iridescent, with a fuscous stain on their anterior margin. Abdo-

men: the basal segment campanulate, its apical margin yellow, with a yellow spot on each side uniting with the apical margin; the apical and lateral margins of the second segment, and an ovate spot on each side uniting with the margin, yellow; the third and following segments yellow; beneath, the apical margin of the second and the following segments yellow.

Hab. Brazil (Villa Nova).

72. EUMENES CINGULATA.

Eumenes cingulatus, *Fabr. Syst. Piez.* 287. 13.
Sauss. Mon. Guêpes Sol. Supp. 151. 41.

Hab. Cayenne.

73. EUMENES FLAVICORNIS.

Eumenes flavicornis, *Sauss. Mon. Guêpes Sol. Supp.* 141. 27. t. 7. f. 4 ♂.

Hab. Venezuela.

74. EUMENES CANALICULATA. B.M.

Vespa canaliculata, *Oliv. Encycl. Méth.* vi. 672.
Vespa diadema, *Fabr. Ent. Syst. Supp.* 263.
Eumenes diadema, *Fabr. Syst. Piez.* 285. 3.
Eumenes canaliculata, *Sauss. Mon. Guêpes Sol.* 68. 56. t. 11. f. 5.

Hab. South America.

75. EUMENES ORBIGNII.

Eumenes Orbignii, *Sauss. Mon. Guêpes Sol.* 69. 57 ♀.

Hab. Bolivia.

76. EUMENES COLONA. B.M.

Eumenes colona, *Sauss. Mon. Guêpes Sol.* 70. 59 ♀.

Hab. Jamaica; Columbia.

77. EUMENES ORNATA.

Eumenes ornatus, *Sauss. Mon. Guêpes Sol. Supp.* 147. 35. t. 8. f. 3.

Hab. West Indies.

78. EUMENES CALLIMORPHA. B.M.

Eumenes callimorpha, *Sauss. Mon. Guêpes Sol.* 71. 61. t. 12. f. 4.

Hab. Columbia.

79. EUMENES PICTA. B.M.

Male. Length 4½ lines.—The head black, the anterior margin of the clypeus notched; the scape in front, the clypeus and a spot above, and also the mandibles, yellow; the scape above and the flagellum ferruginous, the latter with a black stain above towards the apex. Thorax ferruginous, the anterior and posterior margins of the mesothorax with a black stain; the anterior margin of the prothorax, a large spot beneath the wings, the scutellum, post-scutellum and metathorax, yellow; the scutellum at the inferior margin and a triangular stain beneath the post-scutellum ferruginous; the wings subhyaline, with a yellow stain along the anterior margin of the superior pair, a dark fuscous cloud occupying the marginal cell; the legs yellow, the femora with a ferruginous stain above; the thorax beneath, the coxæ and base of the femora more or less, black. Abdomen ferruginous, and covered with a bright changeable pile; the petiole and base of the second segment of the abdomen black, the latter with a transverse ferruginous band dividing the darker part; the apical margin of the segment narrowly bordered with yellow.

Hab. St. Domingo.

This species closely resembles *Eumenes colona*, and both are found in St. Domingo; but, irrespective of size, the present species has the petiole of a different form, being wider and more convex towards the apex; the rest of the abdomen is more globose and not subpetiolated as in *E. colona*.

80. EUMENES ABDOMINALIS.

Sphex abdominalis, *Drury, Illustr. Ins.* i. t. 45. f. 2.
Vespa attenuata, *Oliv. Encycl. Méth.* vi. 674.
Fabr. Syst. Ent. 372. 44; *Spec. Ins.* i. 469; *Mant. Ins.* i. 233. 77; *Ent. Syst.* ii. 282. 98.
Polistes attenuatus, *Fabr. Syst. Piez.* 279. 44.
Eumenes abdominalis, *Sauss. Mon. Guêpes Sol.* 70. 58.

Hab. Cuba.

81. EUMENES MINUTA.

Eumenes minuta, *Fabr. Syst. Piez.* 291. 23 ♂.
Sauss. Mon. Guêpes Sol. 39. 14.

Hab. North America.

82. EUMENES SUBSTRICTA.

Eumenes substricta, *Haldeman, Journ. Acad. Nat. Sc. Philad.* ii. 54.
Sauss. Mon. Guêpes Sol. Supp. 152. 42.

Hab. North America.

83. EUMENES COMPRESSA.

Eumenes compressus, *Sauss. Mon. Guêpes Sol. Supp.* 142. 28. t. 7. f. 5–5 *a*.

Hab. North America?

84. EUMENES GLOBULOSA.

Eumenes globulosus, *Sauss. Mon. Guêpes Sol. Supp.* 139. 23. t. 8. f. 6.

Hab. North America.

85. EUMENES AGILIS.

Eumenes agilis, *Sauss. Mon. Guêpes Sol.* 42. 20.

Hab. North America.

86. EUMENES MACROPS. B.M.

Eumenes macrops, *Sauss. Mon. Guêpes Sol.* 41. 18.

Hab. North Carolina.

87. EUMENES VERTICALIS.

Eumenes verticalis, *Say, Exped. to the Source of St. Peter's Riv. Append.* ii. 78.
Sauss. Mon. Guêpes Sol. 41. 17.

Hab. Pennsylvania.

88. EUMENES FRATERNA. B.M.

Eumenes fraterna, *Say, Exped. to the Source of St. Peter's Riv. Append.* 77.
Sauss. Mon. Guêpes Sol. 40. 16. t. 11. f. 8.

Hab. Pennsylvania.

89. EUMENES FERVENS. B.M.

Eumenes fervens, *Sauss. Mon. Guêpes Sol.* 40. 15 (var. *E. fraterna*?).

Hab. Carolina.

90. EUMENES SMITHII. B.M.

Eumenes Smithii, *Sauss. Mon. Guêpes Sol.* 43. 21. t. 10. f. 1.

Hab. Florida.

91. Eumenes Americana.

Eumenes Americana, *Sauss. Mon. Guêpes Sol.* 39. 13.
Hab. Mexico.

Genus 9. PACHYMENES.

Vespa, pt., *Oliv. Encycl. Méth.* vi. 675 (1791).
Pachymenes, *Sauss. Mon. Guêpes Sol.* 73.

1. Pachymenes sericea.

Pachymenes sericea, *Sauss. Mon. Guêpes Sol.* 74. 1. t. 12. f. 5.
Hab. Brazil.

2. Pachymenes atra.

Pachymenes atra, *Sauss. Mon. Guêpes Sol.* 75. 2.
Hab. Brazil.

3. Pachymenes pallipes. B.M.

Vespa pallipes, *Oliv. Encycl. Méth.* vi. 675.
Pachymenes pallipes, *Sauss. Mon. Guêpes Sol.* 75. 3.
Hab. Cayenne; South America.

4. Pachymenes brunnea.

Pachymenes brunnea, *Sauss. Mon. Guêpes Sol.* 76. 4. t. 12. f. 6.
Hab. Cayenne; South America.

5. Pachymenes ventricosa.

Pachymenes ventricosa, *Sauss. Mon. Guêpes Sol.* 77. 5.
Hab. South Carolina.

6. Pachymenes chrysothorax. B.M.

Pachymenes chrysothorax, *Sauss. Mon. Guêpes Sol. Supp.* 153. 43.
Hab. Brazil.

7. Pachymenes obscura. B.M.

Female. Length 9 lines.—Black, with an obscure ferruginous tinge in parts; the clypeus deeply emarginate at the apex, smooth and slightly shining; the extreme base of the scape and the flagellum ferruginous, the latter slightly fuscous above towards the base. The posterior margin of the prothorax, two abbre-

viated longitudinal lines on the mesothorax, an obscure spot on each side of the scutellum and the post-scutellum, ferruginous; the anterior tibiæ and tarsi in front, and the tips of the joints of the two posterior pairs, ferruginous; the wings flavo-hyaline; the metathorax with a deep longitudinal impression in the middle, and covered with a fine changeable pile. The second segment of the abdomen slightly wrinkled transversely on the disk.

Hab. Mexico.

This insect is placed with some hesitation in the genus *Pachymenes*; but the parts of the mouth cannot be examined: a single example only has been obtained.

Genus 10. SYNAGRIS.

Vespa, pt., *Linn. Syst. Nat.* i. 951 (1766).
Synagris, *Latr. Gen. Crust. et Ins.* iv. 135 (1804).
Apis, pt., *Drury, Illustr. Exot. Ins.* ii.

1. Synagris calida. B.M.

Vespa calida, *Linn. Syst. Nat.* i. 952. 27.
Fabr. Syst. Ent. 366. 18; *Spec. Ins.* i. 462; *Mant. Ins.* i. 289. 27; *Ent. Syst.* ii. 262. 33; *Syst. Piez.* 259. 25.
Christ. Hym. 225.
Oliv. Encycl. Méth. vi. 683.
Gmelin, Ed. Linn. v. p. 2759.
Vespa carbonaria, *De Geer, Ins.* vii. 607. t. 45. f. 9.
Vespa Capensis, *Linn. Syst. Nat.* i. 952. 22.
Gmelin, Ed. Linn. v. p. 2758. 22.
Muell. Ed. Linn. Ins. ii. 887. 27.
Vespa (Crabro) microrrhœa, *Christ. Hym.* 218. t. 18. f. 6.
Vespa spiniventris, *Illig. Mag.* i. 887. 27.
Synagris calida, *Palis. de Beauv. Ins. Afr. et Amér.* 260. t. 10. f. 6.
St. Farg. Encycl. Méth. x. 510. 2; *Hym.* ii. 594. 4.
Guér. Icon. Règn. An. 446. t. 72. f. 3; *Voy. Abyss. Lefeb.* vi. 362; *Reiche & Fairm. Voy. de Ferret et Galinier*, 452. t. 29. f. 7, 8 ♂.
Sauss. Mon. Guêpes Sol. 79. 1.

Hab. Africa.

2. Synagris dentata.

Synagris dentata, *Sauss. Mon. Guêpes Sol.* 80. 2.

Hab. Africa (Senegal).

♂

3. Synagris æstuans. B.M.

Vespa æstuans, *Fabr. Ent. Syst.* ii. 262. 32; *Syst. Piez.* 258. 24.
Oliv. Encycl. Méth. vi. 683.
Gmelin, Ed. Linn. v. 2752. 48.
Synagris æstuans, *Pal. de Beauv. Ins. d'Afr. et Amér.* 260. t. 10. f. 5.
St. Farg. Encycl. Méth. x. 510. 3; *Hym.* ii. 594. 3.
Sauss. Mon. Guêpes Sol. 81. 3.

Hab. Africa.

4. Synagris æquatorialis. B.M.

Synagris æquatorialis, *Sauss. Mon. Guêpes Sol.* 81. 4 ♂.

Hab. Africa.

5. Synagris mirabilis. B.M.

Synagris mirabilis, *Guér. Voy. en Abyss. de Lefeb.* vi. *Ins.* 359. t. 8. f. 8.
Reiche & Fairm. Voy. en Abyss. de Ferret et Galinier, iii. 453. t. 29. f. 10.
Sauss. Mon. Guêpes Sol. 82. 5 ♂.

Hab. Abyssinia.

6. Synagris cornuta. B.M.

Vespa cornuta, *Linn. Syst. Nat.* i. 951. 20; *Mus. Lund. Ulr.* 409. f. 3.
Fabr. Syst. Ent. 363. 7; *Ent. Syst.* ii. 255. 8.
Christ. Hym. 214. t. 18. f. 2.
Oliv. Encycl. Méth. vi. 678. t. 382. 10.
Gmelin, Ed. Linn. v. 2758. 20.
Muell. Ed. Linn. ii. 885. 20.
Apis cornuta, *Drury, Ill. Exot. Ins.* ii. 48. 3.
Synagris cornuta, *Latr. Hist. Ins.* iii. 360; *Hist. Nat. Crust. et Ins.* iv. 135.
St. Farg. Encycl. Méth. x. 510. 1; *Hym.* ii. 593.
Griff. Anim. Kingd. Ins. 106. f. 1. t. 107.
Sauss. Mon. Guêpes Sol. 82. 6. t. 13. 1.

Hab. Cape of Good Hope; Guinea.

7. Synagris xanthura.

Synagris xanthura, *Sauss. Mon. Guêpes Sol. Supp.* 155. 44 ♀.

Hab. Senegal.

8. Synagris bellicosa.

Synagris bellicosa, *Sauss. Mon. Guêpes Sol.* 84. 7.

Hab. Senegal.

9. Synagris Abyssinica. B.M.

Synagris Abyssinica, *Guér. Voy. en Abyss. de Lefeb.* vi. 360. *Reiche & Fairm. Voy. en Abyss. de Ferret et Galinier*, iii. 453. t. 29. f. 9 ♂.

Hab. Abyssinia.

10. Synagris minuta.

Synagris minuta, *Sauss. Mon. Guêpes Sol.* 85. 9 ♂.

Hab. Cape of Good Hope.

11. Synagris spinosuscula.

Synagris spinosuscula, *Sauss. Mon. Guêpes Sol.* 85. 10 ♂.

Hab. Abyssinia.

12. Synagris analis. B.M.

Synagris analis, *Sauss. Mon. Guêpes Sol.* 86. 11. t. 13. f. 5 ♂.

Hab. Abyssinia.

13. Synagris Huberti.

Synagris Huberti, *Sauss. Mon. Guêpes Sol. Supp.* 156. 45. t. 8. f. 8, 8 *a* ♂.

Hab. Tropical Africa.

14. Synagris emarginata. B.M.

Synagris emarginata, *Sauss. Mon. Guêpes Sol. Supp.* 157. 46 ♂.

Hab. Africa.

15. Synagris pentameria.

Synagris pentameria, *Sauss. Mon. Guêpes Sol.* 87. 12 ♂.

Hab. Cape of Good Hope.

16. Synagris abdominalis.

Synagris abdominalis, *Sauss. Mon. Guêpes Sol. Supp.* 157. 47. t. 8. f. 7 ♂.

Hab. Africa.

17. Synagris Spinolæ.

Synagris Spinolæ, *Sauss. Mon. Guêpes Sol. Supp.* 158. 48. t. 8. f. 9, 9 *a* ♂.

Hab. Spain.

Genus 11. MONTEZUMIA.

Vespa, pt., *Oliv. Encycl. Méth.* vi. 675 (1791).
Eumenes, pt., *Fabr. Syst. Piez.* 288 (1804).
Odynerus, pt., *Spin. Ann. Soc. Ent. Fr.* x. 127 (1841).
Montezumia, *Sauss. Mon. Guêpes Sol.* 87.

1. Montezumia rufidentata. B.M.

Montezumia rufidentata, *Sauss. Mon. Guêpes Sol.* 88. 1 ♀.

Hab. Brazil.

2. Montezumia azureipennis. B.M.

Montezumia azureipennis, *Sauss. Mon. Guêpes Sol.* 89. 2 ♀.

Hab. Brazil.

3. Montezumia azurescens.

Odynerus? azurescens, *Spin. Compt. Rend. Hym. Mem. Accad. Torino*, xiii. new ser. 83. 64.
Montezumia rufipes, *Sauss. Mon. Guêpes Sol.* 89. 3. t. 15. f. 1 ♀.

Hab. Brazil.

4. Montezumia rubritarsis.

Montezumia rubritarsis, *Sauss. Mon. Guêpes Sol.* 90. 4 ♀.

Hab. Brazil.

5. Montezumia cærulea. B.M.

Montezumia cærulea, *Sauss. Mon. Guêpes Sol.* 90. 5. t. 12. f. 8 ♀.

Hab. Guiana.

6. Montezumia morosa.

Montezumia morosa, *Sauss. Mon. Guêpes Sol.* 90. 6.

Hab. South America.

7. Montezumia ferruginea.

Montezumia ferruginea, *Sauss. Mon. Guêpes Sol.* 91. 7.

Hab. South America.

8. Montezumia anceps.

Montezumia anceps, *Sauss. Mon. Guêpes Sol.* 92. 8 ♀.

Hab. Chili.

9. Montezumia platina.

Montezumia platina, *Sauss. Mon. Guêpes Sol.* 92. 9. t. 15. f. 3 ♀.

Hab. Buenos Ayres.

10. Montezumia cortesia.

Montezumia cortesia, *Sauss. Mon. Guêpes Sol.* 92. 10. t. 15. f. 2 ♀.

Hab. Mexico.

11. Montezumia Leprieuri.

Odynerus Leprieuri, *Spin. Ann. Soc. Ent. Fr.* 1st ser. x. 127.
Montezumia pelagica, *Sauss. Mon. Guêpes Sol.* 93. 11.

Hab. Brazil.

12. Montezumia Spinolæ.

Montezumia Spinolæ, *Sauss. Mon. Guêpes Sol.* 93. 12. t. 12. f. 9.

Hab. —— ?

13. Montezumia infundibuliformis. B.M.

Eumenes infundibuliformis, *Fabr. Syst. Piez.* 288. 13.
Montezumia dimidiata, *Sauss. Mon. Guêpes Sol.* 94. 13.

Hab. Mexico.

14. Montezumia Mexicana.

Montezumia Mexicana, *Sauss. Mon. Guêpes Sol.* 94. 14.

Hab. Mexico.

15. Montezumia chalybea. B.M.

Montezumia chalybea, *Sauss. Mon. Guêpes Sol. Supp.* 161. 49. t. 9. f. 2, 2 *d.*

Hab. Brazil.

16. Montezumia petiolata.

Montezumia petiolata, *Sauss. Mon. Guêpes Sol. Supp.* 161. 50. t. 9. f. 1, 1 *a*, 1 *b.*

Hab. Brazil.

17. Montezumia nigriceps.

Eumenes nigriceps, *Spin. Ann. Soc. Ent. Fr.* 1st ser. x. 128. 79.
Sauss. Mon. Guêpes Sol. Supp. 162. 51.

Hab. Cayenne.

18. Montezumia infernalis.

Odynerus infernalis, *Spin. Compt. Rend. Ins. Mem. Accad. Torino*, xiii. 84. 65.
Sauss. Mon. Guêpes Sol. Supp. 162. 52.

Hab. Para.

19. Montezumia analis. B.M.

Montezumia analis, *Sauss. Mon. Guêpes Sol. Supp.* 163. 53.

Hab. South America.

20. Montezumia sepulchralis.

Montezumia sepulchralis, *Sauss. Mon. Guêpes Sol. Supp.* 163. 54.

Hab. Brazil.

21. Montezumia mortuorum.

Montezumia mortuorum, *Sauss. Mon. Guêpes Sol. Supp.* 164. 55.

Hab. Brazil.

22. Montezumia Brasiliensis.

Montezumia Brasiliensis, *Sauss. Mon. Guêpes Sol. Supp.* 164. 56.

Hab. Brazil.

23. Montezumia macrocephala.

Montezumia macrocephala, *Sauss. Mon. Guêpes Sol. Supp.* 165. 57 ♂. t. 9. f. 3.

Hab. Brazil.

24. Montezumia carinulata. B.M.

Odynerus carinulatus, *Spin. Compt. Rend. Hym. Mem. Accad. Torino*, xiii. 67. 63.
Montezumia carinulata, *Sauss. Mon. Guêpes Sol. Supp.* 166. 58.

Hab. Brazil (Para).

25. MONTEZUMIA INDICA. B.M.

Montezumia Indica, *Sauss. Mon. Guêpes Sol. Supp.* 167. 59. t. 9. f. 4.

Hab. Java.

Genus 12. MONOBIA.

Vespa, pt., *Linn. Syst. Nat.* i. 951 (1766).
Odynerus, pt., *St. Farg. Hym.* ii. 619 (1841).
Monobia, *Sauss. Mon. Guêpes Sol.* 94 (1852).

1. MONOBIA QUADRIDENS. B.M.

Vespa quadridens, *Linn. Syst. Nat.* i. 951. 15.
Christ. Hym. 234.
Muell. Ed. Linn. Ins. ii. 883. 15.
Gmel. Ed. Linn. Syst. Nat. ii. 27. 55. 15.
Vespa uncinata, *Fabr. Syst. Ent.* 367. 22; *Spec. Ins.* i. 463; *Mant.* i. 289. 32; *Ent. Syst.* ii. 264. 39; *Syst. Piez.* 259. 31.
Oliv. Encycl. Méth. vi. 685.
Vespa cincta-nigra, *De Geer, Ins.* iii. 583. 8. t. 29. f. 12.
Odynerus uncinatus, *St. Farg. Hym.* ii. 619. 9.
Monobia quadridens, *Sauss. Mon. Guêpes Sol.* 97. 4. t. 16. f. 1.

Hab. North Carolina; North America.

2. MONOBIA SYLVATICA. B.M.

Monobia sylvatica, *Sauss. Mon. Guêpes Sol.* 95. 1. t. 15. f. 7.

Hab. North America.

3. MONOBIA ANOMALA.

Monobia anomala, *Sauss. Mon. Guêpes Sol.* 96. 3. t. 15. f. 4.

Hab. Brazil.

4. MONOBIA ANGULOSA. B.M.

Monobia angulosa, *Sauss. Mon. Guêpes Sol.* 98. 5. t. 15. f. 5.

Hab. Brazil.

5. MONOBIA APICALIPENNIS. B.M.

Monobia apicalipennis, *Sauss. Mon. Guêpes Sol.* 98. 6. t. 15. f. 6.

Hab. Brazil (Para).

6. Monobia cyanipennis.

Odynerus cyanipennis, *Guér. Voy. Coq. Ins.* 264. t. 9. f. 5.
Monobia cyanipennis, *Sauss. Mon. Guêpes Sol.* 96. 2.

Hab. Chili (Payta).

7. Monobia egregia.

Monobia egregia, *Sauss. Mon. Guêpes Sol. Supp.* 168. 60. t. 9. f. 5.

Hab. West India Islands.

Genus 13. ABISPA.

Vespa, pt., *Fabr. Syst. Ent.* 362 (1775).
Odynerus, pt., *Guér. Voy. Coq. Ins.* 265 (1822–25).
Abispa, *Mitchell, Exped. East. Austr.* i. 104 (1838).
Monorebia, *Sauss. Mon. Guêpes Sol.* 98 (1852).

1. Abispa ephippium. B.M.

Vespa ephippium, *Fabr. Syst. Ent.* 362. 2; *Mus. Dom. Banks.*; *Mant. Ins.* i. 287. 3; *Ent. Syst.* ii. 254. 3; *Syst. Piez.* 254. 3.
Christ. Hym. 237.
Oliv. Encycl. Méth. vi. 677.
Gmelin, Ed. Linn. Syst. Nat. i. 2748. 36.
Abispa ephippium, *Mitchell, Exped. East. Austr.* i. 104.
Smith, Trans. Ent. Soc. Lond. 2nd ser. 177. t. 26. f. 1, 2.
Sauss. Mon. Guêpes Sol. Supp. 170.
Monorebia ephippium, *Sauss. Mon. Guêpes Sol.* 100. 2. t. 15. f. 9.

Hab. Australia.

2. Abispa Australis. B.M.

Female. Length 1 inch.—This species closely resembles *A. splendida*, but appears to be intermediate between that species and *A. ephippium*. From *A. splendida* it differs in having the head entirely yellow; the scutellum and post-scutellum yellow; the metathorax is proportionably longer, its lateral posterior angles are acute, and on each side is a sharp serrated ridge; the basal segment of the abdomen has the sides less distinctly rounded. From *A. ephippium* it is distinguished by the colouring of the basal segment of the abdomen, which in this species is black, with a broad yellow band on its apical margin which widens at the sides; the segment is also more campanulate than in *A. ephippium*, which has the segment entirely yellow.

Hab. Port Essington.

This insect is regarded by Saussure as a variety of *A. splendida*;

if it be a variety, it must, I think, be so of *A. ephippium*: this point must be left for future determination by some entomologist resident in Australia who can carefully observe the habits of the insect.

3. Abispa splendida. B.M.

Odynerus splendidus, *Guér. Voy. Coq. Ins.* 265.
Monorebia splendida, *Sauss. Mon. Guêpes Sol.* 99. 1.
Abispa splendida, *Sauss. Mon. Guêpes Sol. Supp.* 169. t. 15. f. 8.

Hab. Australia; Tasmania.

Genus 14. RHYNCHIUM.

Vespa, pt., *Fabr. Ent. Syst.* ii. 265 (1793).
Polistes, pt., *Fabr. Syst. Piez.* 273 (1804).
Rygchium, *Spin. Ins. Ligur.* i. (1806).
Odynerus, pt., *Guér. Voy. Ind. Or. de Bélanger, Zool.* 503 (1834).
Rhynchium, *Sauss. Mon. Guêpes Sol. Supp.* 170 (1854–56).
Ancistrocerus, pt., *Smith, Trans. Ent. Soc. Supp.* n. s. ii. 36.

Div. I.—*Species of Europe.*

1. Rhynchium oculatum. B.M

Vespa oculata, *Fabr. Spec. Ins.* i. 463; *Mant. Ins.* i. 289. 35; *Ent. Syst.* ii. 265. 43.
Oliv. Encycl. Méth. vi. 685.
Rossi, Faun. Etrus. ii. 85.
Villers, Ent. iii. 235. 21.
Rygchium Europeum, *Spin. Ins. Lig.* i. 86.
Latr. Gen. Crust. et Ins. iv. 139.
St. Farg. Hym. ii. 680. 2.
Sauss. Mon. Guêpes Sol. 107. 8.
Rygchium Lefevrei, *St. Farg. Hym.* ii. 679. 1 (var.).

Hab. Central Europe; Italy; Algeria.

Div. II.—*Species of India and China.*

2. Rhynchium nitidulum. B.M.

Vespa nitidula, *Fabr. Ent. Syst. Suppl.* 262. 44; *Syst. Piez.* 260. 35.
Rygchium nitidulum, *Sauss. Mon. Guêpes Sol.* 105. 5.

Hab. India.

3. Rhynchium Bengalense.

Rhynchium Bengalense, *Sauss. Mon. Guêpes Sol. Supp.* 167. 66. t. 9. f. 8.

Hab. Bengal.

4. Rhynchium atrum. B.M.

Rygchium atrum, *Sauss. Mon. Guêpes Sol.* 109. 11.

Hab. India.

5. Rhynchium hæmorrhoidale. B.M.

Vespa hæmorrhoidalis, *Fabr. Syst. Ent.* 366. 12; *Spec. Ins.* i. 463; *Mant. Ins.* i. 289. 29; *Ent. Syst.* ii. 263. 36; *Syst. Piez.* 259. 28.
Oliv. Encycl. Méth. vi. 683.
Christ. Hym. 242.
Odynerus dimidiatus, *Guér. Voy. aux Ind. Or. de Bélanger, Zool.* 503. t. 4. f. 4.
Rygchium hæmorrhoidale, *Sauss. Mon. Guêpes Sol.* 109. 12.
Rygchium parentissimum, *Sauss. Mon. Guêpes Sol.* 111. 14.

Hab. India; Java; Cape of Good Hope.

6. Rhynchium sanguineum.

Rygchium sanguineum, *Sauss. Mon. Guêpes Sol.* 110. 13.

Hab. Java.

7. Rhynchium brunneum. B.M.

Vespa quinquecincta, *Fabr. Ent. Syst.* ii. 261; *Syst. Piez.* 288. 23.
Oliv. Encycl. Méth. Ins. vi. 682. 63.
Vespa brunnea, *Fabr. Ent. Syst.* ii. 264. 41; *Syst. Piez.* 260. 33.
Odynerus brunneus, *Latr. Gen. Crust. et Ins.* iv. 136. t. 14. f. 3.
Rygchium brunneum, *Sauss. Mon. Guêpes Sol.* 112. 16. t. 14. f. 4.

Hab. Bengal.

8. Rhynchium Carnaticum. B.M.

Vespa carnatica, *Fabr. Ent. Syst. Supp.* 261; *Syst. Piez.* 258. 22.
Rygchium carnaticum, *Sauss. Mon. Guêpes Sol.* 112. 17 (var. R. brunneum?).

Hab. Bengal.

9. Rhynchium metallicum. B.M.

Rygchium metallicum, *Sauss. Mon. Guêpes Sol.* 114. 21. t. 14. f. 8.

Hab. India (Madras).

10. Rhynchium argentatum. B.M.

Vespa argentata, *Fabr. Syst. Piez.* 260. 39.
Rygchium argentatum, *Sauss. Mon. Guêpes Sol.* 115. 22.

Hab. India.

11. Rhynchium Mellyi.

Rygchium Mellyi, *Sauss. Mon. Guêpes Sol.* 116. 24.

Hab. India; China.

12. Rhynchium dichotomum.

Rygchium dichotomum, *Sauss. Mon. Guêpes Sol.* 116. 25.

Hab. India.

13. Rhynchium mandarinium.

Rhynchium mandarinium, *Sauss. Mon. Guêpes Sol. Supp.* 180. 73.

Hab. China.

14. Rhynchium flavopunctatum.

Ancistrocerus flavopunctatus, *Smith, Trans. Ent. Soc. Supp.* new ser. ii. 36. t. 9. f. 7.

Hab. China (Teing-Tung).

15. Rhynchium flavomarginatum. B.M.

Rhynchium flavomarginatum, *Smith, Trans. Ent. Soc. Lond.* new ser. ii. 35.
Sauss. Mon. Guêpes Sol. Supp. 177. 68. t. 9. f. 7.

Hab. China.

16. Rhynchium Smithii.

Rhynchium Smithii, *Sauss. Mon. Guêpes Sol. Supp.* 174. 62.

Hab. China.

17. Rhynchium ornatum. B.M.

Rhynchium ornatum, *Smith, Trans. Ent. Soc. Lond.* 2nd ser. ii. t. 8. f. 10.
Sauss. Mon. Guêpes Sol. Supp. 173. 61.

Hab. China.

Div. III.—*Species of Africa.*

18. Rhynchium bioculatum. B.M.

Rhynchium bioculatum, *Sauss. Mon. Guêpes Sol. Supp.* 183. 78.
Rygchium auro-maculatum, *Sauss. Mon. Guêpes Sol.* 104. 4?
Hab. Africa.

19. Rhynchium Sichelii.

Rhynchium Sichelii, *Sauss. Mon. Guêpes Sol. Supp.* 176. 65.
Hab. Africa.

20. Rhynchium laterale. B.M.

Vespa lateralis, *Fabr. Spec. Ins.* i. 466; *Mant.* i. 29. 2; *Ent. Syst.* ii. 275. 77.
Polistes lateralis, *Fabr. Syst. Piez.* 233. 22.
Vespa marginella, *Fabr. Ent. Syst.* ii. 263. 34; *Syst. Piez.* 259. 26.
Vespa Africanum, *Fabr. Syst. Piez.* 257. 19.
Rygchium Africanum, *Sauss. Mon. Guêpes Sol.* 108. 10.
Rhynchium laterale, *Sauss. Mon. Guêpes Sol. Supp.* 171. t. 14. f. 3.
Hab. Africa.

21. Rhynchium dimidiatum.

Odynerus dimidiatus, *Spin. Ann. Soc. Ent. Fr.* vii. 502.
Rhynchium dimidiatum, *Sauss. Mon. Guêpes Sol. Supp.* 182. 76.
Hab. Africa.

22. Rhynchium fallax. B.M.

Rhynchium fallax, *Sauss. Mon. Guêpes Sol. Supp.* 175. 63.
Hab. North Africa.

23. Rhynchium rubens.

Rhynchium rubens, *Sauss. Mon. Guêpes Sol. Supp.* 181. 75.
Hab. Cape of Good Hope.

24. Rhynchium xanthurum.

Rhynchium xanthurum, *Sauss. Mon. Guêpes Sol. Supp.* 182. 77.
Hab. Cape of Good Hope.

25. Rhynchium synagroides. B.M.

Rygchium synagroides, *Sauss. Mon. Guêpes Sol.* 103. 1. t. 14. f. 2 ♂.
Hab. Tropical Africa.

26. Rhynchium auro-maculatum. B.M.

Rygchium auro-maculatum, *Sauss. Mon. Guêpes Sol.* 104. 4. t. 14. f. 1.

Hab. Senegal; Java. (Coll. F. Smith.)

27. Rhynchium cyanopterum. B.M.

Rygchium cyanopterum, *Sauss. Mon. Guêpes Sol.* 108. 9. *Savig. Descr. Egypt. Hym.* t. 9. f. 9.

Hab. Senegal; Egypt.

28. Rhynchium sabulosum. B.M.

Rhynchium sabulosum, *Sauss. Mon. Guêpes Sol. Supp.* 179. 70.

Hab. Senegal.

29. Rhynchium ardens.

Odynerus ardens, *Guér. Voy. en Abyss. de Lefeb.* 362. t. 8. f. 9.
Rygchium ardens, *Sauss. Mon. Guêpes Sol.* 104. 3 ♂.

Hab. Abyssinia.

30. Rhynchium Niloticum.

Rhynchium niloticum, *Sauss. Mon. Guêpes Sol. Supp.* 181. 74.

Hab. Abyssinia.

31. Rhynchium Abyssinicum. B.M.

Rygchium Abyssinicum, *Sauss. Mon. Guêpes Sol.* 103. 2 ♀.

Hab. Abyssinia.

32. Rhynchium Grayi. B.M.

Rhynchium Grayi, *Sauss. Mon. Guêpes Sol. Supp.* 175. 64.

Hab. Port Natal.

33. Rhynchium multispinosum.

Rhynchium multispinosum, *Sauss. Mon. Guêpes Sol. Supp.* 177. 67.

Hab. Port Natal.

34. Rhynchium radiale. B.M.

Rhynchium radiale, *Sauss. Mon. Guêpes Sol. Supp.* 179. 71.

Hab. Port Natal.

Div. IV.—*Species of Madagascar and New Guinea.*

35. Rhynchium Madegasse.

Rygchium Madegasse, *Sauss. Mon. Guêpes Sol.* 111. 15 ♀.

Hab. Madagascar.

36. Rhynchium transversum. B.M.

Vespa abdominalis, *Illig. Mag. F. Ins.* (1801) 192.
Vespa transversa, *Fabr. Syst. Piez.* 257. 16.
Rygchium transversum, *Sauss. Mon. Guêpes Sol.* 117. 26. t. 14. f. 7 ♀.
Rygchium dichotomum, *Sauss. Mon. Guêpes Sol.* 116. 25. t. 14. f. 7?

Hab. Madagascar.

37. Rhynchium limbatum.

Rygchium limbatum, *Sauss. Mon. Guêpes Sol.* 117. 27. t. 13. f. 9.

Hab. Madagascar.

38. Rhynchium zonale.

Rygchium zonale, *Sauss. Mon. Guêpes Sol.* 113. 19.

Hab. New Guinea.

39. Rhynchium annuliferum.

Rygchium annuliferum, *Boisd. Voy. de l'Astrol.* vi. 654.
Sauss. Mon. Guêpes Sol. 118.

Hab. New Guinea (Carteret Harbour).

40. Rhynchium rufipes. B.M.

Vespa rufipes, *Fabr. Syst. Ent.* 367. 23; *Spec. Ins.* i. 463; *Mant. Ins.* i. 289. 33; *Ent. Syst.* ii. 264. 40; *Syst. Piez.* 259. 32.
Christ. Hym. 240.
Oliv. Encycl. Méth. vi. 685.
Odynerus rufipes, *Guér. Voy. de la Coq. Ins.* 265.
Rygchium rufipes, *Sauss. Mon. Guêpes Sol.* 115. 23.

Hab. Otaheite; New Guinea.

Div. V.—*Species of Australia and Tasmania.*

41. Rhynchium decoratum.

Rhynchium decoratum, *Sauss. Mon. Guêpes Sol. Supp.* 180. 72. t. 9. f. 6.

Hab. New Holland.

42. Rhynchium Alecto.

Odynerus Alecto, *St. Farg. Hym.* ii. 647. 32.
Rhynchium Alecto, *Sauss. Mon. Guêpes Sol.* 114. 20.
Hab. New Holland.

43. Rhynchium superbum.

Rhynchium superbum, *Sauss. Mon. Guêpes Sol.* 113. 18 ♀.
Hab. New Holland.

44. Rhynchium mirabile.

Rhynchium mirabile, *Sauss. Mon. Guêpes Sol.* 106. 6. t. 14. f. 5.
Hab. Tasmania.

Div. VI.—*Species of North America.*

45. Rhynchium dorsale. B.M.

Vespa dorsalis, *Fabr. Syst. Ent.* 367. 25; *Ent. Syst.* ii. 265. 44.
Oliv. Encycl. Méth. vi. 685. 81.
Polistes dorsalis, *Fabr. Syst. Piez.* 273. 19.
Rhynchium balteatum, *Say, Bost. Journ. Nat. Hist.* i. 383. 1. (1837).
Rhynchium Louisianum, *Sauss. Mon. Guêpes Sol.* 171. t. 13. f. 10.
Hab. United States.

Genus 15. ODYNERUS.

Vespa, pt., *Linn. Syst. Nat.* i. 948 (1766).
Epipone, *Latr. Hist. Nat. Ins.* (1804).
Odynerus, *Latr. Hist. Nat. Ins.* (1804).
Symmorphus, *Wesm. Mon. Odyn. Belg.* (1833).
Oplopus, *Wesm. Mon. Odyn. Belg.* (1833).
Ancistrocerus, *Wesm. Mon. Odyn. Belg.* (1833).
Pterochilus, pt., *Herr.-Schæff. Faun. Germ.* 173.

Div. I.—*Species of Europe.*

1. Odynerus crassicornis. B.M.

Vespa muraria, *Scop. Ent. Carn.* 828.
Vespa parietum, *Fabr. Ent. Syst.* ii. 265. 45; *Syst. Piez.* 261. 44.
Schrank, Faun. Boic. 253. 2208.
Odynerus parietum, *Latr. Hist. Nat. Ins.* xiii. 347.
Spin. Ins. Lig. ii. 180.
Schrank, Faun. Boic. ii. 253. 2208.

Vespa crassicornis, *Panz. Faun. Germ.* 53. 8.
Schæff. Icon. Ins. Ratisb. t. 24. f. 3.
Vespa bipunctata, *Villers, Ent.* iii. 24.
Odynerus crassicornis, *Wesm. Mon. Belg.* 39. 8.
St. Farg. Hym. ii. 663. 41.
Sauss. Mon. Guêpes Sol. 123. 1, *& Supp.* 117. 79. t. 10. f. 2.
Symmorphus crassicornis, *Wesm. Mon. Odyn. Belg. Supp.* 2. 8.

Hab. Europe.

2. ODYNERUS MURARIUS. B.M.

Vespa muraria, *Linn. Faun. Suec.* 1674; *Syst. Nat.* i. 950. 8; *& Cab. Mus. Linn. Soc.*
Gmel. Ed. Linn. i. 2751. 8.
Odynerus murarius, *Sauss. Mon. Guêpes Sol. Supp.* 188. 80. t 10. f. 1.

Hab. Scandinavia.

3. ODYNERUS NIDULATOR.

Odynerus nidulator, *Sauss. Mon. Guêpes Sol. Supp.* 189. 31.

Hab. South of Europe.

4. ODYNERUS ARCTICUS.

Odynerus arcticus, *Sauss. Mon. Guêpes Sol. Supp.* 189. 82.

Hab. Sweden.

5. ODYNERUS SUECICUS.

Odynerus Suecicus, *Sauss. Mon. Guêpes Sol. Supp.* 190. 83. t. 10. f. 3 ♀.

Hab. Sweden.

6. ODYNERUS ALLOBROGUS.

Odynerus allobrogus, *Sauss. Mon. Guêpes Sol. Supp.* 190. 84. t. 10. f. 4 ♀.

Hab. Mountains of Savoy.

7. ODYNERUS GRACILIS. B.M.

Odynerus gracilis, *Brullé, Expéd. Sc. de Morée, Ins.* iii. t. 50. f. 3.
Odynerus elegans, *Wesm. Mon. Odyn. Belg.* 42. 7.
St. Farg. Hym. ii. 664. 13.
Herr.-Schæff. Faun. Germ. 154. 17.
Sauss. Mon. Guêpes Sol. 124. 2.

Hab. Europe.

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8. ODYNERUS HERRICHIANUS.

Odynerus Herrichianus, *Sauss. Mon. Guêpes Sol. Supp.* 191. 85.

Hab. Germany.

9. ODYNERUS SINUATUS. B.M.

Vespa sinuata, *Fabr. Ent. Syst.* ii. 270; *Syst. Piez.* 264. 61.
Odynerus bifasciatus, *Spin. Ins. Lig.* i. 184.
Wesm. Mon. Odyn. Belg. 45. 8.
St. Farg. Hym. ii. 665. 44.
Sauss. Mon. Guêpes Sol. 124. 3.
Symmorphus bifasciatus, *Wesm. Mon. Odyn. Belg. Supp.* 2. 10.
Odynerus connexus, *Curtis, Brit. Ent.* iii. t. 138.
Odynerus sinuatus, *Sauss. Mon. Guêpes Sol. Supp.* 192. 86.

Hab. Europe.

10. ODYNERUS BIFASCIATUS. B.M.

Vespa bifasciata, *Linn. Faun. Suec.* 1683; *Syst. Nat.* i. 950. 14.
Fabr. Ent. Syst. ii. 269. 60; *Syst. Piez.* 264. 59.
Christ. Hym. 234.
Oliv. Encycl. Méth. vi. 687.
Villers, Entom. iii. 270. 11.
Gmel. Ed. Linn. i. 2757. 14.
Muell. Ins. ii. 883. 14.
Odynerus bifasciatus, *Zett. Ins. Lapp.* 457. 6.
Sauss. Mon. Guêpes Sol. Supp. 193. 87. t. 10. f. 5.

Hab. North of Europe.

11. ODYNERUS DEBILITATUS.

Odynerus debilitatus, *Sauss. Mon. Guêpes Sol. Supp.* 194. 88.

Hab. Geneva

12. ODYNERUS FUSCIPES. B.M.

Odynerus fuscipes, *Herr.-Schæff. Faun. Germ.* 154. 18.

Hab. Germany.

13. ODYNERUS ELEGANS.

Odynerus elegans, *Herr.-Schæff. Faun. Germ.* 154. t. 17.
Sauss. Mon. Guêpes Sol. 125. 4.

Hab. Bavaria.

14. Odynerus triphaleratus.

Odynerus triphaleratus, *Sauss. Mon. Guêpes Sol. Supp.* 200.
Odynerus trifasciatus, *St. Farg. Hym.* ii. 653. 36.

Hab. Europe.

15. Odynerus parietum. B.M.

Vespa parietum, *Linn. Faun. Suec.* 1673; *Syst. Nat.* i. 949.
Rossi, Faun. Etrus. ii. 141.
Oliv. Encycl. Méth. vi. 686.
Christ. Hym. 287?
Vespa parietina, *Linn. Faun. Suec.* 1679?
Vespa sexfasciata, *Rossi, Faun. Etrus.* ii. 144.
Schrank, Faun. Boic. ii. 356.
Fabr. Ent. Syst. ii. 268; *Syst. Piez.* 263.
Vespa squamiger, *Fabr. Syst. Piez.* 267. 73.
Vespa sexcincta, *Schrank, Faun. Boic.* ii. 356.
Vespa quadrata, *Panz. Faun. Germ.* 63. 3.
Vespa aucta, *Panz. Faun. Germ.* 81. 17.
Fabr. Ent. Syst. ii. 272; *Syst. Piez.* 267.
Vespa emarginata, *Fabr. Ent. Syst.* ii. 267. 51; *Syst. Piez.* 263. 50?
Vespa trifasciata, *Oliv. Encycl. Méth.* vi. 688.
Vespa æneipennis, *Christ. Hym.* 245. t. 23. f. 3.
Odynerus parietum, *Wesm. Mon. Odyn. Belg.* p. 16, *Supp.* p. 4.
Zett. Ins. Lapp. 455. 1.
St. Farg. Hym. ii. 656.
Sauss. Mon. Guêpes Sol. 130. 10. p. 11. f. 4.
Odynerus affinis, *Herr.-Schæff. Faun. Germ.* 173. 21, & t. 24, var. 1.
Odynerus auctus, *Herr.-Schæff. Faun. Germ.* 173. 22.
Odynerus murarius, *Blanch. Règ. An. Illustr. Ins.* t. 124. f. 3.

Hab. Europe.

16. Odynerus oviventris.

Odynerus oviventris, *Wesm. Mon. Odyn. Belg. Supp.* 2.
St. Farg. Hym. ii. 651. 35.
Sauss. Mon. Guêpes Sol. 132. 12.

Hab. Belgium, &c.

17. Odynerus Antilope. B.M.

Vespa antilope, *Panz. Faun. Germ.* 53. 9.
Vespa parietina, *Panz. Faun. Germ.* 49. 24.
Fabr. Ent. Syst. ii. 268. 53; *Syst. Piez.* 263. 52.
Odynerus biglumis, *Spin. Ins. Lig.* i. 89. & fasc. iii. 186. 4.

Odynerus Antilope, *Wesm. Mon. Odyn. Belg.* 32.
St. Farg. Hym. ii. 649. 34.
Odynerus murarius, *Herr.-Schæff. Faun. Germ.* 173. 26. t. 12. 1 ♀.

Hab. Europe.

18. Odynerus Gazella.

Vespa gazella, *Panz. Faun. Germ.* 53. 10.
Odynerus gazella, *Herr.-Schæff. Faun. Germ.* 173. 27. 176. 4 ♂, 14 ♀.

Hab. Germany.

19. Odynerus viduus.

Odynerus viduus, *Herr.-Schæff. Faun. Germ.* 173. 28, 176. 16.
Sauss. Mon. Guêpes Sol. Supp. 210.

Hab. Germany.

20. Odynerus pictus. B.M.

Odynerus pictus, *Curtis, Brit. Ent.* iii. 138.
Sauss. Mon. Guêpes Sol. Supp. 210. t. 10. f. 10.
Odynerus constans, *Herr.-Schæff. Faun. Germ.* 173. 29.
Ancistrocerus pictus, *Smith, Cat. Brit. Hym.* 46. 6.

Hab. Britain; Scandinavia.

21. Odynerus trifasciatus. B.M.

Vespa trifasciata, *Fabr. Syst. Piez.* 264. 60.
Oliv. Encycl. Méth. vi. 688.
Vespa quadricincta, *Fabr. Syst. Piez.* 262. 46.
Vespa yuncea, *Christ. Hym.* 245. t. 23. f. 8.
Odynerus trifasciatus, *Spin. Ins. Lig.* ii. 184.
Wesm. Mon. Odyn. Belg. 7.
Smith, Cat. Brit. Hym. 46. 4.
Sauss. Mon. Guêpes Sol. Supp. 211. 100.
Odynerus tricinctus, *Herr.-Schæff. Faun. Germ.* 173. p. 20. 176. t. 10 ♀.

Hab. Europe.

22. Odynerus trimarginatus. B.M.

Odynerus trimarginatus, *Zett. Ins. Lapp.* 456. 4.
Sauss. Mon. Guêpes Sol. Supp. 212. t. 10. f. 9.
Odynerus Scoticus, *Curtis, Brit. Ent.* iii. 138?
Ancistrocerus trimarginatus, *Smith, Cat. Brit. Hym.* 46. 5.
Odynerus 4-cinctus, *Herr.-Schæff. Faun. Germ.* 173. 24, 176. 15.

Hab. North of Europe.

23. Odynerus intermedius.

Odynerus intermedius, *Sauss. Mon. Guêpes Sol.* 155. 39.

Hab. France; Algeria; Greece.

24. Odynerus nigripes.

Odynerus nigripes, *Herr.-Schæff. Faun. Germ.* 176. 17?
Sauss. Mon. Guêpes Sol. 190. 87.
Odynerus maculatus, *St. Farg. Hym.* ii. 626. 14.

Hab. France; Germany.

25. Odynerus graphicus. B.M.

Odynerus graphicus, *Sauss. Mon. Guêpes Sol.* 191. 88.

Hab. France.

26. Odynerus Dantici. B.M.

Vespa Dantici, *Rossi, Faun. Etrus.* ii. 89. t. 6. f. 6.
Odynerus post-scutellatus, *St. Farg. Hym.* ii. 627. 15.
Lucas, Explo. Sc. Algér. Ins. iii. 234. t. 11. f. 8.
Herr.-Schæff. Faun. Germ. 173. 14. t. 23.
Odynerus fastidiosus, *Sauss. Mon. Guêpes Sol.* 189. 85; *Supp.* 236.

Hab. France; Italy.

27. Odynerus dubius.

Odynerus dubius, *Sauss. Mon. Guêpes Sol.* 193. 92 (var. O. parvulus?).

Hab. France.

28. Odynerus simplex. B.M.

Vespa simplex, *Fabr. Ent. Syst.* ii. 267. 52; *Syst. Piez.* 263. 51.
Vespa quadrifasciata, *Fabr. Syst. Piez.* 262. 47.
Odynerus trifasciatus, *Spin. Ins. Lig.* ii. 184.
Odynerus 4-fasciatus, *Herr.-Schæff. Faun. Germ.* 173. p. 19. t. 29 ♀.
Odynerus Lindenii, *St. Farg. Hym.* ii. 624. 13.
Sauss. Mon. Guêpes Sol. 194. 93.

Hab. Europe.

29. Odynerus sessilis.

Odynerus sessilis, *Sauss. Mon. Guêpes Sol.* 197. 98.

Hab. Spain.

30. Odynerus Rossii. B.M.

Odynerus Rossii, *St. Farg. Hym.* ii. 633. 19.
Sauss. Mon. Guêpes Sol. 207. 111.
Odynerus Lindenii, *Mon. Guêpes Sol.* 194.

Hab. Europe.

31. Odynerus Fairmairi.

Odynerus Fairmairi, *Sauss. Mon. Guêpes Sol.* 216. 123.

Hab. Spain.

32. Odynerus vulneratus.

Odynerus vulneratus, *Sauss. Mon. Guêpes Sol. Supp.* 248. 122.

Hab. Spain; Cape of Good Hope.

33. Odynerus egregius.

Odynerus egregius, *Herr.-Schæff. Faun. Germ.* 173. p. 15, 176. t. 2.
Sauss. Mon. Guêpes Sol. Supp. 262. 141.

Hab. Spain and Italy.

34. Odynerus notatus.

Odynerus notatus, *Jurine, Hym.* t. 9. f. 15.
Sauss. Mon. Guêpes Sol. Supp. 262. 142.

Hab. Europe.

35. Odynerus Germanicus.

Odynerus germanicus, *Sauss. Mon. Guêpes Sol. Supp.* 266. 146.

Hab. Germany.

36. Odynerus minutus.

Vespa minuta, *Fabr. Ent. Syst. Supp.* 262. 65; *Syst. Piez.* 268. 78.
Odynerus minutus, *St. Farg. Hym.* ii. 632.
Sauss. Mon. Guêpes Sol. 207. 110.
Odynerus pictus, *Herr.-Schæff. Faun. Germ.* 173. p. 30, 176. t. 3 ♀, 8 ♂ ♂.

Hab. Europe.

37. Odynerus Chevrieranus.

Odynerus Chevrieranus, *Sauss. Mon. Guêpes Sol. Supp.* 268. 148. t. 13. f. 2.

Hab. Geneva.

38. Odynerus Dufourianus.

Odynerus Dufourianus, *Sauss. Mon. Guêpes Sol. Supp.* 269. 149.
Hab. France.

39. Odynerus Jurinei.

Odynerus Jurinei, *Sauss. Mon. Guêpes Sol. Supp.* 270. 150.
Hab. France.

40. Odynerus Parisiensis.

Odynerus Parisiensis, *Sauss. Mon. Guêpes Sol. Supp.* 271. 151. t. 13. f. 5.
Hab. Paris.

41. Odynerus xanthomelas.

Odynerus xanthomelas, *Herr.-Schæff. Faun. Germ.* 173. p. 29, 176. t. 7 ♀, 8 *a* ♂.
Sauss. Mon. Guêpes Sol. Supp. 271. 152.
Hab. Germany.

42. Odynerus alpestris.

Odynerus alpestris, *Herr.-Schæff. Faun. Germ.* 173. p. 31, 176. t. 6 ♀, 8 *b* ♂.
Sauss. Mon. Guêpes Sol. Supp. 272. 153. t. 13. f. 3.
Hab. Germany.

43. Odynerus Gallicus.

Odynerus Gallicus, *Sauss. Mon. Guêpes Sol. Supp.* 273. 154.
Hab. France (Aix; Provence).

44. Odynerus lativentris.

Odynerus lativentris, *Sauss. Mon. Guêpes Sol. Supp.* 275. 156.
Hab. France (Montpellier).

45. Odynerus orbitalis.

Odynerus orbitalis, *Herr.-Schæff. Faun. Germ.* 173. 15.
Sauss. Mon. Guêpes Sol. Supp. 277. 158.
Hab. Austria.

46. Odynerus Reaumurii.

Odynerus Reaumurii, *Dufour, Ann. Sc. Nat.* 2nd ser. xi. 90.
Sauss. Mon. Guêpes Sol. 222. 130.
Odynerus Dufourii, *St. Farg. Hym.* ii. 642. 27.
Hab. France.

47. Odynerus spinipes. B.M.

Vespa spinipes, *Linn. Faun. Suec.* 1682; *Syst. Nat.* i. 950. 10.
Fabr. Syst. Ent. 368. 28; *Ent. Syst.* ii. 268. 55; *Syst. Piez.* 263. 54.
Rossi, Faun. Etrus. ii. 86. 868.
Panz. Faun. Germ. 17. 18.
Guêpe solitaire, *Reaum. Ins.* vi. *Mém.* 8. 251. t. 26. f. 2.
Vespa muraria, *Christ. Hym.* 233.
Odynerus spinipes, *Spin. Ins. Lig.* i. 89. 3.
Latr. Hist. Nat. xiii.
Wesm. Mon. Odyn. Belg. 6. 2.
St. Farg. Hym. ii. 608. 2.
Sauss. Mon. Guêpes Sol. 223. 131.
Pterochilus spinipes, *Herr.-Schæff. Faun. Germ.* 173. 16–18.

Hab. Europe.

48. Odynerus melanocephalus. B.M.

Vespa melanocephala, *Gmel. Ed. Syst. Nat.* i. 2760. 96 ♀.
Vespa albofasciata, *Rossi, Faun. Etrus.* ii. 143. 870.
Vespa spinipes, *Oliv. Encycl. Méth.* vi. 687. 87 ♂.
Odynerus melanocephalus, *Wesm. Mon. Odyn. Belg.* 12. 3.
Sauss. Mon. Guêpes Sol. 224. 132.
St. Farg. Hym. ii. 610. 3.
Pterochilus dentipes, *Herr.-Schæff. Faun. Germ.* 173. 3 ♀.
Pterochilus tinniens, *Herr.-Schæff. Faun. Germ.* 6. t. 16 ♂.
Oplopus melanocephalus, *Wesm. Odyn. Belg. Supp.* 2. 3.

Hab. Europe.

49. Odynerus reniformis. B.M.

Vespa reniformis, *Gmel. Ed. Syst. Nat.* i. 2760. 94 ♀.
Vespa melanochra, *Gmel. Ed. Syst. Nat.* i. 2760. 95 ♂?
Odynerus auctus, *Spin. Ins. Lig.* i. 88. 1 & fasc. 3. 185. 1 ♂.
Odynerus reniformis, *Wesm. Mon. Odyn. Belg.* 1.
St. Farg. Hym. ii. 606. 1 (♂ only).
Sauss. Mon. Guêpes Sol. 226. 135. t. 20. f. 1.
Pterochilus coxalis, *Herr.-Schæff. Faun. Germ.* 173. 6. t. 17 ♂.

Hab. France; Belgium.

50. Odynerus lævipes. B.M.

Odynerus lævipes, *Shuck. Loud. Mag. Nat. Hist.* new ser. i. 490.
Sauss. Mon. Guêpes Sol. 228. 137.
Odynerus rubicola, *Dufour, Ann. Sc. Nat.* 2nd ser. xi. 102.
Odynerus reniformis, *St. Farg. Hym.* ii. 606 (♀ only).

Hab. Europe.

51. Odynerus basalis. B.M.

Female. Length 5–5½ lines.—Black: the head and thorax strongly punctured; the base of the clypeus, a spot between the antennæ, and an oblong one behind the eyes, yellow; the scape in front and a narrow line at the inner orbit of the eyes, terminating at their emargination, ferruginous. The prothorax anteriorly, a spot beneath the wings, the tegulæ, an interrupted line on the apical margin of the scutellum, and the post-scutellum, yellow; the metathorax truncate, with a ferruginous spot on each side, in the shape of a comma; the legs ferruginous, with the coxæ and trochanters ferruginous; the wings hyaline, the anterior margin of the superior pair yellowish, the nervures ferruginous at the base and brown towards the apex of the wings. Abdomen closely and finely punctured; the basal segment ferruginous; the apical margin of the segments with a yellow band, that on the second and two following segments widened laterally; a black subtriangular spot in the middle of the basal segment above; beneath, the second segment with a narrow yellow band on its apical margin, and having on each side, as well as the two following segments, an angular yellow spot.

Hab. Polish Ukraine.

Div. II.—*Species of Asia.*

52. Odynerus Ionius.

Odynerus Ionius, *Sauss. Mon. Guêpes Sol. Supp.* 263. 143.

Hab. Rhodes.

53. Odynerus Bohemani.

Odynerus Bohemani, *Sauss. Mon. Guêpes Sol. Supp.* 264. 144. t. 12. f. 6.

Hab. Rhodes; Ionian Islands.

54. Odynerus Rhodensis.

Odynerus Rhodensis, *Sauss. Mon. Guêpes Sol. Supp.* 208. 96. t. 10. f. 7, 7 *a* ♀.

Hab. Rhodes.

55. Odynerus Sichelii.

Odynerus Sichelii, *Sauss. Mon. Guêpes Sol. Supp.* 206. t. 10. f. 6.

Hab. India.

56. Odynerus punctum. B.M.

Odynerus punctum, *Sauss. Mon. Guêpes Sol.* 209. 114. t. 19. f. 2.

Hab. India.

57. Odynerus punctatipennis. B.M.

Odynerus punctatipennis, *Sauss. Mon. Guêpes Sol.* 210. 115.

Hab. India.

58. Odynerus ovalis. B.M.

Odynerus ovalis, *Sauss. Mon. Guêpes Sol.* 215. 122. t. 19. f. 4.

Hab. India; China.

59. Odynerus diffinis.

Odynerus diffinis, *Sauss. Mon. Guêpes Sol. Supp.* 274. 155. t. 14. f. 2 ♀.

Hab. India.

60. Odynerus intricatus. B.M.

Male. Length 4½–5 lines.—Ferruginous: the head and thorax rugose; the clypeus deeply emarginate at the apex; the mandibles, clypeus and a spot above it, yellow; the apex of the mandibles ferruginous, their teeth black; a crown-shaped spot on the vertex, enclosing the stemmata; the prothorax in the middle anteriorly, and the tibiæ and basal joint of the tarsi, yellow outside; the wings fusco-hyaline, the superior pair with a darker cloud along the anterior margin, occupying and terminating at the marginal cell; the metathorax rounded, the post-scutellum bituberculate. Abdomen punctured, the punctures rather distant and slightly impressed on the disk of the first and second segments; on their margins and on the following segments the punctures are stronger; a band on the apical margin of the first segment, the sides and apical margin of the second segment, and the whole of the following segments, yellow; the inner border of the yellow margin at the sides of the second segment semicircular, and the inner border of the apical margin traversed by a black stain; beneath, the second segment with a black spot on each side, its apical margin bordered with yellow, which is produced in the middle into a quadrate shape; the third segment with a black spot on each side.

Hab. Bombay. (Coll. F. Smith.)

This species is probably the male of *O. punctatipennis*; if not, it is closely allied to it.

61. Odynerus flavo-lineatus. B.M.

Female. Length 6 lines.—Black: the clypeus and a spot above it, a spot in the emargination of the eyes and an abbreviated line behind, with the scape in front, yellow; the apex of the flagellum fulvous beneath; the head and thorax closely punctured. The prothorax anteriorly, a spot beneath the wings, the tegulæ and a spot behind them, two abbreviated lines on the mesothorax touching the base of the scutellum, the post-scutellum, and a large subovate spot on each side of the metathorax, yellow; a fuscous spot in the middle of the tegulæ; a spot on the intermediate and posterior coxæ, a broad stripe on the femora in front, not extending to their base, the tibiæ outside, and the claw-joint of the anterior tarsi, yellow; the claw-joint of the intermediate and posterior tarsi rufo-testaceous; wings subhyaline, the anterior and apical margins of the superior pair fuscous. Abdomen closely and finely punctured, the apex nearly glabrous; the apical margins of the segments with a narrow yellow band; beneath closely punctured; the apical margins of the segments narrowly and obsoletely banded with testaceous yellow.

Hab. Java.

62. Odynerus confluentus. B.M.

Female. Length 5¼ lines.—Black: the head, thorax and abdomen covered with confluent punctures, which are elongate, and on the abdomen have a tendency to run into striæ. The scape in front, the clypeus and a spot above it, the emargination of the eyes and a broad stripe behind them, yellow; the flagellum beneath and the mandibles ferruginous. The prothorax in front, the mesothorax beneath the wings, two abbreviated lines on the disk of the mesothorax, the tegulæ, two ovate spots on the scutellum, the post-scutellum and the metathorax, yellow; the latter with a black stripe down the centre; the apical lateral angles of the metathorax acute; the legs yellow, the femora behind, the tips of the posterior tibiæ within and of the joints of the tarsi slightly ferruginous; the wings subhyaline, the costal cell and the apex of the anterior wings fuscous. Abdomen: the apical and lateral margins of the basal segment, a narrow band a little before the apical margins of the second and three following segments, yellow; beneath, the first and second segments yellow, the second with a narrow central black stripe; an interrupted yellow fascia on the apical margins of the three following segments.

Hab. Sumatra.

63. ODYNERUS RUFESCENS. B.M.

Female. Length 4½ lines.—Black: head and thorax strongly and closely punctured; the clypeus, labrum, scape in front and the face, reddish-yellow; a large black spot above each antenna and descending to the base of the clypeus; the antennæ and mandibles ferruginous, yellowish at their base; a broad orange stripe behind the eyes. The prothorax above, a spot beneath the wings, two longitudinal stripes on the mesothorax, the tegulæ, scutellum, post-scutellum, metathorax and legs, reddish-yellow; the tibiæ and femora paler outside, the margins of the scutellum and post-scutellum black; the metathorax truncate, rugose, and with a central longitudinal carina, the lateral margins of the truncation crenate; the wings fulvo-hyaline, with a fuscous cloud in the marginal cell. Abdomen: the first segment and the base of the second ferruginous; the apical margin of the first segment with a narrow yellow fascia, widest in the middle; the second and following segments with broad fasciæ, that on the second widest in the middle; beneath, ferruginous, a yellow fascia on the second segment, its anterior margin notched in the middle and emarginate on each side.

Hab. Ceram. (Coll. Madame Ida Pfeiffer.)

64. ODYNERUS FRAGILIS. B.M.

Male. Length 3½ lines.—Black: the head, thorax and abdomen coarsely punctured; the clypeus and a spot above it, the scape in front, a spot in the emargination of the eyes, another behind them, and the mandibles, yellow; the tips of the latter ferruginous, with their teeth black; a black spot on the clypeus; the flagellum fulvous beneath. The thorax truncate in front, a large spot on each side of the anterior margin of the prothorax, a spot beneath the wings, the hinder margin of the tegulæ, a subinterrupted transverse line on the scutellum and a large ovate spot on each side of the metathorax, yellow; the apex of the anterior and intermediate femora in front, the tibiæ outside, and the anterior tarsi, yellow, the latter with ferruginous stains; the intermediate and posterior tarsi dusky. Abdomen subpetiolate; the basal segment very narrow, about half the width of the second, which has an ovate yellow spot on each side at its base; the apical margins of the first and second segments, and a transverse spot on the apical margins of the fifth and sixth segments, yellow; the second segment with a yellow band on its apical margin, its anterior edge waved.

Hab. Borneo.

65. ODYNERUS ATERRIMUS.

Odynerus aterrimus, *Sauss. Mon. Guêpes Sol.* 128. 7.

Hab. China.

66. ODYNERUS DYSCHERUS.

Odynerus dyscherus, *Sauss. Mon. Guêpes Sol.* 175. 66.

Hab. China.

67. ODYNERUS TRUNCATUS.

Odynerus truncatus, *Sauss. Mon. Guêpes Sol.* 175. 66.

Hab. China.

68. ODYNERUS NIGRIFRONS. B.M.

Female. Length 8 lines.—Black: the head and thorax covered with coarse confluent punctures; the clypeus very convex, rugose and slightly notched at the apex; the scape yellow in front. The prothorax with two minute yellow spots on its anterior margin; the truncation of the metathorax slightly concave and sculptured with curved transverse striæ; the tegulæ, the femora towards their apex and the claws ferruginous; wings smoky-hyaline, with a beautiful violet iridescence. Abdomen closely punctured, coarsely so towards the apex; the two basal segments with a narrow interrupted yellow fascia on their apical margins.

Hab. North China (Shanghai).

DIV. III.—*Species of Australia and Tasmania.*

69. ODYNERUS FLUVIALIS.

Odynerus fluvialis, *Sauss. Mon. Guêpes Sol. Supp.* 215. 106.

Hab. Australia.

70. ODYNERUS CRUENTUS.

Odynerus cruentus, *Sauss. Mon. Guêpes Sol. Supp.* 221. 115.

Hab. New Holland.

71. ODYNERUS SANGUINOLENTUS. B.M.

Odynerus sanguinolentus, *Sauss. Mon. Guêpes Sol. Supp.* 221. 116.

Hab. New Holland.

72. ODYNERUS SUBALARIS.

Odynerus subalaris, *Sauss. Mon. Guêpes Sol. Supp.* 280. 162. t. 14. f. 5.

Hab. New Holland.

73. Odynerus succinctus.

Odynerus succinctus, *Sauss. Mon. Guêpes Sol.* 204. 107.

Hab. New Holland; Tasmania.

74. Odynerus Caledonicus.

Odynerus Caledonicus, *Sauss. Mon. Guêpes Sol.* 205. 108.

Hab. New Caledonia.

75. Odynerus neglectus. B.M.

Odynerus neglectus, *Sauss. Mon. Guêpes Sol. Supp.* 245. 118.

Hab. New Holland.

76. Odynerus bicinctus.

Vespa bicincta, *Fabr. Ent. Syst.* ii. 271. 65; *Syst. Piez.* 265. *St. Farg. Hym.* ii. 644.
Sauss. Mon. Guêpes Sol. Supp. 224.

Odynerus bizonatus, *Boisd. Voy. de l'Astrol. Entom.* 459 ♂. *Sauss. Mon. Guêpes Sol.* 156. 40.

Hab. New Holland; Isles of the Pacific; Cape of Good Hope.

77. Odynerus saucius.

Odynerus saucius, *Sauss. Mon. Guêpes Sol. Supp.* 280. 163.

Hab. New Holland.

78. Odynerus bicoloratus. B.M.

Odynerus bicoloratus, *Sauss. Mon. Guêpes Sol. Supp.* 281. 164.

Hab. New Holland. (Coll. J. S. Baly, Esq.)

79. Odynerus alariformis.

Odynerus alariformis, *Sauss. Mon. Guêpes Sol. Supp.* 282. 165. t. 14. f. 6.

Hab. New Holland.

80. Odynerus flammiger.

Odynerus flammiger, *Sauss. Mon. Guêpes Sol. Supp.* 282. 166.

Hab. New South Wales.

81. Odynerus Balyi.

Odynerus Balyi, *Sauss. Mon. Guêpes Sol. Supp.* 283. 167. t. 14. f. 6.

Hab. New Holland.

82. ODYNERUS ANGULATUS. B.M.

Odynerus angulatus, *Sauss. Mon. Guêpes Sol. Supp.* 284. 168. t. 14. f. 7.

Hab. New Holland.

83. ODYNERUS BICOLOR. B.M.

Odynerus bicolor, *Sauss. Mon. Guêpes Sol. Supp.* 284. 169.

Hab. New Holland (Macintyre River).

84. ODYNERUS TRIANGULUM.

Odynerus triangulum, *Sauss. Mon. Guêpes Sol. Supp.* 285. 170. t. 14. f. 8.

Hab. Australia.

85. ODYNERUS METATHORACICUS.

Odynerus metathoracicus, *Sauss. Mon. Guêpes Sol. Supp.* 286. 171.

Hab. New Holland.

86. ODYNERUS PUSILLUS.

Odynerus pusillus, *Sauss. Mon. Guêpes Sol. Supp.* 287. 172.

Hab. New Holland.

87. ODYNERUS FLAVO-CINCTUS. B.M.

Male. Length 4 lines.—Black: the head and thorax roughly punctured; a minute spot behind the eyes, another between the antennæ and the clypeus, yellow; the clypeus deeply emarginate anteriorly, the angles spinose. Thorax: the prothorax anteriorly, a spot beneath the wings, another on each side of the scutellum, yellow; the metathorax concavely truncate, a minute tooth on each side in the middle of the margin of the truncation, the tooth yellow; the wings hyaline, the anterior margin of the superior pair fuscous; the knees, tibiæ and tarsi ferruginous. Abdomen shining; the first segment much narrower than the second and with a longitudinal impressed line above; the apical margins of the first and second segments with narrow yellow bands which are slightly notched in the middle; the second is continuous beneath, notched in the middle and emarginate on each side; the third and following segments have their apical margins obscurely ferruginous; the first segment and the base of the second with a bright silky pubescence.

Hab. New Holland.

This is probably the male of *O. emarginatus*, the species having the clypeus deeply emarginate and spined at the angles.

88. Odynerus Alastoripennis.

Odynerus Alastoripennis, *Sauss. Mon. Guêpes Sol.* 147. 34. t. 16. f. 5.

Hab. Tasmania.

89. Odynerus vernalis.

Odynerus vernalis, *Sauss. Mon. Guêpes Sol.* 148. 35 ♀.

Hab. Tasmania.

90. Odynerus extranæus.

Odynerus exilis, *Sauss. Mon. Guêpes Sol.* 157. 41. t. 17. f. 2.
Odynerus extranæus, *Sauss. Mon. Guêpes Sol. Supp.* 224.

Hab. Tasmania.

91. Odynerus clypeatus.

Odynerus clypeatus, *Sauss. Mon. Guêpes Sol.* 200. 101. t. 18. f. 6.

Hab. Tasmania.

92. Odynerus nigrocinctus.

Odynerus nigrocinctus, *Sauss. Mon. Guêpes Sol.* 201. 102.

Hab. Tasmania.

93. Odynerus Diemensis. B.M.

Odynerus Diemensis, *Sauss. Mon. Guêpes Sol.* 201. 103 ♀.

Hab. Tasmania.

94. Odynerus concolor.

Odynerus concolor, *Sauss. Mon. Guêpes Sol.* 202. 104. t. 18. f. 7.

Hab. Tasmania.

95. Odynerus tamarinus. B.M.

Odynerus Tamarinus, *Sauss. Mon. Guêpes Sol.* 203. 105.

Hab. Tasmania.

96. Odynerus alaris.

Odynerus alaris, *Sauss. Mon. Guêpes Sol.* 203. 106. t. 18. f. 5.

Hab. Tasmania.

97. Odynerus Tasmaniensis. B.M.

Odynerus Tasmaniensis, *Sauss. Mon. Guêpes Sol.* 199. t. 18. f. 4.

Hab. Tasmania.

Div. IV.—*Species of Africa* (*Madagascar*).

98. Odynerus trilobus. B.M.

Vespa triloba, *Fabr. Mant. Ins.* i. 290. 41; *Ent. Syst.* ii. 268. 54; *Syst. Piez.* 263. 53.
Oliv. Encycl. Méth. vi. 687. 86.
Odynerus trilobus, *St. Farg. Hym.* ii. 635. 20.
Sauss. Mon. Guêpes Sol. 186. 82.

Hab. Isle of France; Madagascar.

99. Odynerus melanus.

Odynerus melanus, *Sauss. Mon. Guêpes Sol.* 159. 44. t. 18. f. 9.

Hab. Madagascar.

100. Odynerus renimacula.

Odynerus renimacula, *St. Farg. Hym.* ii. 654. 37.
Lucas, Explo. Sc. Algér. iii. 238.
Sauss. Mon. Guêpes Sol. 128. 8.
Savigny, Descr. Egypt. Hym. t. 9. f. 2 ♂.

Hab. Algeria.

101. Odynerus Atropos.

Odynerus Atropos, *St. Farg. Hym.* ii. 661. 41.
Lucas, Explo. Sc. Algér. iii. 240.
Sauss. Mon. Guêpes Sol. 134. 15.

Hab. Algeria; Egypt.

102. Odynerus longispinosus.

Odynerus longispinosus, *Sauss. Mon. Guêpes Sol. Supp.* 213.

Hab. Algeria.

103. Odynerus Macta.

Odynerus Macta, *St. Farg. Hym.* ii. 639. 24.
Lucas, Explo. Sc. Algér. iii. 236.
Sauss. Mon. Guêpes Sol. 159. 43. t. 11. f. 7.

Hab. Algeria.

104. Odynerus fastidiosus.

Odynerus fastidiosus, *Sauss. Mon. Guêpes Sol.* 189. 85 ♀.

Hab. Algeria.

105. Odynerus innumerabilis.

Odynerus innumerabilis, *Sauss. Mon. Guêpes Sol.* 189. 86, *& Supp.* 233 (O. posticus, *Herr.-Schæff.*?).

Hab. Algeria.

106. Odynerus crenatus. B.M.

Odynerus crenatus, *St. Farg. Hym.* ii. 629. 16.
Lucas, Explo. Sc. Algér. Ins. iii. 235.
Sauss. Mon. Guêpes Sol. 191. 89. t. 12. f. 5.
Vespa aucta, *Fabr. Syst. Piez.* 267. 74?

Hab. Algeria.

107. Odynerus parvulus.

Pterochilus lætus, *Herr.-Schæff. Faun. Germ.* 173. 8. t. 23 ♂.
Odynerus parvulus, *St. Farg. Hym.* ii. 631. 17.
Lucas, Explo. Sc. Algér. Ins. iii. 236. t. 11. f. 9.
Sauss. Mon. Guêpes Sol. 193. 91.
Odynerus Amadensis, *Sauss. Mon. Guêpes Sol. Supp.* 214. 105. var., *& Supp.* 279. t. 12. f. 9.

Hab. Algeria.

108. Odynerus filipalpis.

Odynerus filipalpis, *Sauss. Mon. Guêpes Sol.* 197. 97 ♀.
(*Savigny*), *Descr. Egypt. Hym.* t. 9. f. 12.

Hab. Algeria.

109. Odynerus tripunctatus. B.M.

Vespa tripunctata, *Fabr. Mant.* i. 290. 47; *Ent. Syst.* ii. 270. 63; *Syst. Piez.* 264. 62.
Oliv. Encycl. Méth. vi. 688. 93.
Odynerus tripunctatus, *Sauss. Mon. Guêpes Sol.* 196. 96.
Descr. Egypt. (*Savigny*) *Hym.* t. 9. f. 11.

Hab. Algeria; Egypt.

110. Odynerus floricola.

Odynerus floricola, *Sauss. Mon. Guêpes Sol.* 196. 95. t. 18. f. 3, *& Supp.* 239. 196.

Hab. Algeria.

111. Odynerus emortualis.

Odynerus emortualis, *Sauss. Mon. Guêpes Sol.* 230. 139. t. 19. f. 9.

Hab. Algeria?

112. Odynerus bispinosus.

Odynerus bispinosus, *St. Farg. Hym.* ii. 622. 11.
Lucas, Explo. Sc. Algér. iii. 232. t. 11. f. 6.
Sauss. Mon. Guêpes Sol. 206. 109.

Hab. Algeria.

113. Odynerus bivittatus.

Odynerus bivittatus, *St. Farg. Hym.* ii. 617. 8.
Sauss. Mon. Guêpes Sol. 211. 117. t. 19. f. 3.

Hab. Algeria.

114. Odynerus luteolus.

Vespa labiata, *Fabr. Ent. Syst. Supp.* 260. 18? *Syst. Piez.* 257. 18?
Odynerus luteolus, *St. Farg. Hym.* ii. 616. 7.
Lucas, Explo. Sc. Algér. iii. 231. t. 11. f. 4.
Sauss. Mon. Guêpes Sol. 216. 123, *& Supp.* 245.

Hab. Algeria (Oran).

115. Odynerus regulus.

Odynerus regulus, *Sauss. Mon. Guêpes Sol. Supp.* 247. 121. t. 11. f. 5 ♂.

Hab. Algeria.

116. Odynerus fastidiosissimus.

Odynerus fastidiosissimus, *Sauss. Mon. Guêpes Sol. Supp.* 265. 145. t. 12. f. 7.

Hab. Algeria.

117. Odynerus Blanchardianus.

Odynerus Blanchardianus, *Sauss. Mon. Guêpes Sol. Supp.* 276. 157. t. 13. f. 8.

Hab. Algeria.

118. Odynerus Doursii.

Odynerus Doursii, *Sauss. Mon. Guêpes Sol. Supp.* 278. 160.

Hab. Algeria.

119. Odynerus Pontebæ.

Odynerus Pontebæ, *Sauss. Mon. Guêpes Sol. Supp.* 279. 161.

Hab. Algeria (Ponteba).

120. Odynerus notula. B.M.

Odynerus notula, *St. Farg. Hym.* ii. 612. 4.
Lucas, Explo. Sc. Algér. iii. 229. t. 11. f. 2.
Sauss. Mon. Guêpes Sol. 219. 126.

Hab. Algeria.

121. Odynerus variolosus.

Odynerus variolosus, *St. Farg. Hym.* ii. 613. 5.
Lucas, Explo. Sc. Algér. iii. 235.
Sauss. Mon. Guêpes Sol. 220. 127.

Hab. Algeria.

122. Odynerus rotundigaster.

Odynerus rotundigaster, *Sauss. Mon. Guêpes Sol.* 221. 128. t. 19. f. 8.

Hab. Algeria.

123. Odynerus rufidulus.

Odynerus rufidulus, *St. Farg. Hym.* ii. 641. 26.
Lucas, Explo. Sc. Algér. iii. t. 11. f. 11.
Sauss. Mon. Guêpes Sol. 222. 129.

Hab. Algeria.

124. Odynerus variegatus.

Vespa variegata, *Fabr. Ent. Syst.* ii. 269. 59.
Odynerus flavus, *St. Farg. Hym.* ii. 615. 6.
Lucas, Explo. Sc. Algér. iii. 230. t. 11. f. 3.
Odynerus variegatus, *Sauss. Mon. Guêpes Sol.* 229. 138.

Hab. Algeria.

125. Odynerus bidentatus.

Odynerus bidentatus, *St. Farg. Hym.* ii. 623. 12.
Lucas, Explo. Sc. Algér. iii. 233. t. 11. f. 7.
Sauss. Mon. Guêpes Sol. 188. 84. t. 18. f. 1.

Hab. Algeria (Oran).

126. Odynerus impunctatus.

Odynerus impunctatus, *Spin. Ann. Soc. Ent. Fr.* 1st ser. vii. 502.
Descr. Egypt. (*Savigny*) *Hym.* t. 9. f. 5.

Hab. Egypt.

127. Odynerus chloroticus. B.M.

Odynerus chloroticus, *Spin. Ann. Soc. Ent. Fr.* 1st ser. vii. 500.
Odynerus testaceus, *Sauss. Mon. Guêpes Sol.* 195. 94.
Descr. Egypt. (*Savigny*) *Hym.* t. 10. f. 1.

Hab. Egypt.

128. Odynerus biphaleratus.

Odynerus biphaleratus, *Sauss. Mon. Guêpes Sol.* 134. 14. t. 16. f. 2.
Descr. Egypt. (*Savigny*) *Hym.* t. 9. f. 6 ♀.

Hab. Egypt.

129. Odynerus canaliculatus.

Odynerus canaliculatus, *Sauss. Mon. Guêpes Sol. Supp.* 260. 138. t. 14. f. 4, 4 *a*.

Hab. Arabia.

130. Odynerus dimidiatus.

Odynerus dimidiatus, *Spin. Ann. Soc. Ent. Fr.* 1st ser. vii. 502.

Hab. Egypt.

131. Odynerus Savignyi.

Odynerus Savignyi, *Sauss. Mon. Guêpes Sol.* 226. 134.

Hab. Arabia (Djidda).

132. Odynerus Alexandrinus.

Odynerus Alexandrinus, *Sauss. Mon. Guêpes Sol.* 225. 133.

Hab. Egypt.

133. Odynerus quadri-tuberculatus. B.M.

Male. Length 4 lines.—Black: the clypeus notched at the apex; the head and thorax coarsely punctured; the clypeus and a spot above it, a spot in the emargination of the eyes and another behind them, pale testaceous; a transverse ferruginous band on the clypeus, the mandibles, the flagellum beneath, and its two basal segments, ferruginous. The prothorax, a spot beneath the wings, the tegulæ, two minute spots on the scutellum and post-scutellum, the sides of the metathorax and the legs, ferruginous; the tibiæ outside and the basal joint of the tarsi white; a pale testaceous spot in the middle of the anterior margin of the prothorax, and another on the tegulæ in front; the wings subhyaline, the anterior and apical margins of the superior pair dark fuscous; the scutellum and post-scutellum subdentate on each side

laterally. The first and second segments of the abdomen ferruginous at the sides; all the segments with a white fascia on their apical margins; beneath, the second segment ferruginous, with a white fascia on its apical margin, the inner edge of which is waved.

Hab. Port Natal.

This species is allied to *Odynerus vulneratus* of Saussure.

134. Odynerus Eumenoides. B.M.

Male. Length 3 lines.—Black: the abdomen subpetiolate, the first segment campanulate and much narrower than the second; the clypeus narrowed and bidentate at the apex; a transverse line at its base and a narrow line on the scape in front, yellow. The prothorax truncate, the metathorax rounded; the former with a line in front, a spot on the tegulæ behind, the post-scutellum, tibiæ and tarsi, yellow; the anterior legs wanting; the apical joints of the tarsi ferruginous; the wings hyaline, their apical margins clouded, as well as the apex of the externo-medial cell. The first and second segments of the abdomen with a yellow fascia on their apical margins; one or two of the following segments with a yellow spot in the middle of their apical margins.

Hab. Port Natal.

135. Odynerus Capensis.

Odynerus Capensis, *Sauss. Mon. Guêpes Sol. Supp.* 214. 104.

Hab. Cape of Good Hope.

136. Odynerus rhynchiformis.

Odynerus rhynchiformis, *Sauss. Mon. Guêpes Sol.* 174. 65. t. 17. f. 12.

Hab. Cape of Good Hope.

137. Odynerus Silaensis.

Odynerus Silaos, *Sauss. Mon. Guêpes Sol.* 213. 119, *& Supp.* 244. t. 19. f. 6.

Hab. Isle of Bourbon; Cape of Good Hope.

138. Odynerus Hottentottus.

Odynerus posticus, *Sauss. Mon. Guêpes Sol.* 214. 120, *& Supp.* 244.

Hab. Cape of Good Hope.

139. Odynerus Natalensis.

Odynerus Natalensis, *Sauss. Mon. Guêpes Sol. Supp.* 261. 140.

Hab. Cape of Good Hope (Port Natal).

140. Odynerus imbecilis.

Odynerus imbecilis, *Sauss. Mon. Guêpes Sol.* 126. 5 ♂.

Hab. Sierra Leone.

141. Odynerus Æthiopicus.

Odynerus Æthiopicus, *Sauss. Mon. Guêpes Sol. Supp.* t. 13. f. 8.

Hab. Sierra Leone.

142. Odynerus bisuturalis.

Odynerus bisuturalis, *Sauss. Mon. Guêpes Sol.* 127. 6.

Hab. Senegal.

143. Odynerus difformis.

Odynerus difformis, *Sauss. Mon. Guêpes Sol.* 145. 31. t. 16. f. 11.
Descr. Egypt. (*Savigny*) *Ins. Hym.* t. 8. f. 11.

Hab. Senegal.

144. Odynerus rhynchoides.

Odynerus rhynchoides, *Sauss. Mon. Guêpes Sol.* 174. 64. t. 7. f. 12.

Hab. Senegal.

145. Odynerus Synagroides.

Odynerus Synagroides, *Sauss. Mon. Guêpes Sol.* 198. 99. t. 18. f. 2 ♀.

Hab. Senegal.

146. Odynerus multicolor.

Odynerus multicolor, *Sauss. Mon. Guêpes Sol.* 209. 113. t. 18. f. 11.

Hab. Senegal.

147. Odynerus bellatus. B.M.

Odynerus bellatus, *Sauss. Mon. Guêpes Sol.* 210. 116. t. 18. f. 10.
Descr. Egypt. (*Savigny*) *Hym.* t. 9. f. 14.

Hab. Senegal; Egypt.

148. Odynerus troglodytes.

Odynerus troglodytes, *Sauss. Mon. Guêpes Sol. Supp.* 249. 128.

Hab. Senegal.

149. Odynerus miniatus.

Odynerus miniatus, *Sauss. Mon. Guêpes Sol. Supp.* 249. 124. t. 11. f. 6 ♀.

Hab. Senegal.

150. Odynerus Senegalensis.

Odynerus Senegalensis, *Sauss. Mon. Guêpes Sol.* 219. 125. t. 19. f. 7.

Hab. Senegal.

151. Odynerus combustus.

Male. Length 5 lines.—Ferruginous, variegated with yellow spots and bands: the clypeus narrowed in front and bidentate at the apex; the outer orbit of the eyes, the inner orbits as high as their emargination, the base of the mandibles, the clypeus, and a spot above it and the scape in front, yellow; the flagellum slightly fuscous above towards the apex. Thorax: the prothorax in front, a spot beneath the wings, the tegulæ, a line on each side of the scutellum, the post-scutellum, the sides of the metathorax, the coxæ in front, the tips of the femora and the tibiæ in front, yellow; the wings hyaline, with a fuscous stain along the anterior margin of the superior pair. Abdomen: the first, second and third segments with a yellow fascia on their apical margins, the second and third continued beneath; the entire insect closely and rather strongly punctured.

Hab. Africa (the Gambia). (Coll. F. Smith.)

In colouring, this species resembles *O. mutans*, but in that species the abdomen is smooth, and its first segment produced in the middle of its apical margin above into an angular shape, which is not the case in the present species.

152. Odynerus instabilis.

Female. Length 4 lines.—Black: the metathorax red; the scape in front, the base and apex of the clypeus, the mandibles, a transverse line on the forehead entering the emargination of the eyes, a line on their inner orbit, and also an elongate spot behind them, yellow; the scape above and the flagellum, fulvous, the latter slightly fuscous above towards the apex; the mandibles usually more or less ferruginous. The prothorax anteriorly, a spot beneath the wings, the tegulæ, scutellum and legs, yellow; the coxæ and tarsi slightly ferruginous; the wings hyaline, with the anterior margin of the superior pair fuscous; the metathorax truncate and slightly concave. The first and second segments of the abdomen with a broad yellow fascia on their posterior margins,

which are widened at the sides; the third segment with a narrower fascia and the following of a reddish yellow.

Male.—Frequently very highly coloured, the yellow markings being of a bright sulphur-yellow, and the clypeus notched at the apex; the thorax ferruginous, the mesothorax stained with black at its basal and apical margins; the abdomen ferruginous, with a black stain on the second and third segments above; the colour variable, the thorax being sometimes black above.

Hab. Africa (Gambia). (Coll. F. Smith.)

153. Odynerus tropicalis.

Odynerus tropicalis, *Sauss. Mon. Guêpes Sol.* 214. 121. t. 19. f. 5.

Hab. Abyssinia.

154. Odynerus fervidus.

Odynerus fervidus, *Sauss. Mon. Guêpes Sol. Supp.* 288. 174.

Hab. Africa.

155. Odynerus Guerinii.

Odynerus Guerinii, *Sauss. Mon. Guêpes Sol.* 176. 68 ♂.

Hab. Africa.

156. Odynerus tectus.

Vespa tectus, *Fabr. Spec. Ins.* i. 466. 48; *Ent. Syst.* ii. 274; *Syst. Piez.* 261. 40.

Oliv. Encycl. Méth. vi. 690. 107.

Odynerus tectus, *Sauss. Mon. Guêpes Sol. Supp.* 258. 135.

Hab. Africa.

157. Odynerus signatus. B.M.

Odynerus signatus, *Sauss. Mon. Guêpes Sol. Supp.* 258. 136.

Hab. Africa.

158. Odynerus carinulatus.

Odynerus carinulatus, *Sauss. Mon. Guêpes Sol. Supp.* 259. 137. t. 14. f. 3, 3 *a*.

Hab. Africa.

159. Odynerus Madæra.

Odynerus Madæra, *Sauss. Mon. Guêpes Sol.* 150. 38.

Hab. Madeira.

160. Odynerus ochlerus. B.M.

Odynerus ochlerus, *Sauss. Mon. Guêpes Sol.* 131. 11.
Savigny, Descr. Egypt. Hym. t. 9. f. 2?

Hab. Madeira.

161. Odynerus hæmatodes.

Odynerus hæmatodes, *Brullé, Hist. Nat. Il. Canar.* 89. t. 3. f. 14.
Sauss. Mon. Guêpes Sol. 149. 36.

Hab. Canary Islands.

162. Odynerus rubropictus.

Odynerus hæmatodes (var.), *Brullé, Hist. Nat. Il. Canar. Ins.* 98 ♀.
Odynerus rubropictus, *Sauss. Mon. Guêpes Sol.* 150. 37.

Hab. Canary Islands.

163. Odynerus reflexus.

Odynerus reflexus, *Brullé, Hist. Nat. Il. Canar.* 89.
Sauss. Mon. Guêpes Sol. 187. 83.

Hab. Canary Islands.

Div. V.—*Species of South America* (*Chili, Peru, Brazil, Columbia, &c.*).

164. Odynerus ambiguus.

Odynerus ambiguus, *Spin. Faun. Chili, Zool.* vi. 264. 9.
Sauss. Mon. Guêpes Sol. 140. 23. t. 6. f. 4.

Hab. Chili.

165. Odynerus scabriusculus.

Odynerus scabriusculus, *Spin. Faun. Chili, Zool.* vi. 262. 8.
Sauss. Mon. Guêpes Sol. 140. 24. t. 11. f. 1.

Hab. Chili.

166. Odynerus Bustillosi.

Odynerus Bustillos, *Sauss. Mon. Guêpes Sol.* 141. 25 ♂; *Supp.* 205. 141.
Odynerus bustillosi, *Sauss. Faun. Chili, Zool.* vi. *Supp.* 567. 10.

Hab. Chili.

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167. Odynerus excipiendus.

Eumenes excipienda, *Spin. Faun. Chili,* vi. 266. 1.
Odynerus excipiendus, *Sauss. Mon. Guêpes Sol.* 161. 47.
Odynerus colocolo, *Sauss. Mon. Guêpes Sol.* 161. 46, *& Supp.* 227. t. 17. f. 4.

Hab. Chili.

168. Odynerus subpetiolatus.

Odynerus subpetiolatus, *Sauss. Mon. Guêpes Sol.* 162. 48.
Odynerus coarctatus, *Sauss. Faun. Chili,* vi. *Supp.* 565. 7.

Hab. Chili.

169. Odynerus tuberculiventris.

Eumenes tuberculiventris, *Spin. Faun. Chili,* vi. 267. 2.
Odynerus tuberculiventris, *Sauss. Mon. Guêpes Sol.* 162. 49.

Hab. Chili (Coquimbo, Tucapel).

170. Odynerus tuberculatus.

Odynerus tuberculatus, *Sauss. Mon. Guêpes Sol.* 163. 50.
Sauss. Faun. Chili, Zool. vi. *Supp.* 564. 6.

Hab. Chili.

171. Odynerus labiatus.

Odynerus labiatus, *Halid. Trans. Linn. Soc.* xvii. 323.
Odynerus Lachesis, *St. Farg. Hym.* ii. 667. 44.
Sauss. Mon. Guêpes Sol. 167. 51, *& Supp.* 228. t. 17. f. 5.
Odynerus marginicollis, *Spin. Faun. Chili,* vi. 256.

Hab. Chili.

172. Odynerus obscuripennis.

Odynerus obscuripennis, *Spin. Faun. Chili,* vi. 259. 4.
Sauss. Mon. Guêpes Sol. 165. 52.
Odynerus Coquimbensis, *Sauss. Faun. Chili,* vi. *Supp.* 561. 1.

Hab. Chili.

173. Odynerus villosus.

Odynerus villosus, *Sauss. Faun. Chili,* vi. *Supp.* 563. 4; *Mon. Guêpes Sol.* 165. 53.

Hab. Chili.

174. Odynerus humeralis. B.M.

Odynerus humeralis, *Halid. Trans. Linn. Soc.* xvii. 324 ♀.
Odynerus Chiliensis, *St. Farg. Hym.* ii. 643. 28.
Odynerus Chilensis, *Spin. Faun. Chili*, vi. 255. 1.
Sauss. Mon. Guêpes Sol. 166. 54. t. 17. f. 6, & *Supp.* 228.

Hab. Chili; Columbia.

175. Odynerus arcuatus.

Odynerus arcuatus, *Sauss. Mon. Guêpes Sol.* 160. 45.

Hab. Chili.

176. Odynerus Autucensis.

Odynerus Autuco, *Sauss. Mon. Guêpes Sol.* 167. 55, & *Supp.* 228.
Odynerus Autucensis, *Sauss. Faun. Chili*, vi. *Supp.* 562. 2.

Hab. Chili.

177. Odynerus Chiliotus.

Odynerus Chiliotus, *Sauss. Mon. Guêpes Sol.* 167. 56, & *Supp.* 229. 167; *Faun. Chili*, vi. *Supp.* 564. t. 17. f. 6.

Hab. Chili.

178. Odynerus ruficollis.

Odynerus ruficollis, *Spin. Faun. Chili*, vi. 259. 5.
Sauss. Mon. Guêpes Sol. 168. 57.

Hab. Chili.

179. Odynerus maypinus.

Odynerus maipinus, *Sauss. Mon. Guêpes Sol.* 169. 58.
Odynerus maypinus, *Sauss. Faun. Chili, Zool.* vi. *Supp.* 564. 5.

Hab. Chili.

180. Odynerus Gayi. B.M.

Odynerus Gayi, *Spin. Faun. Chili*, vi. 260. 6.
Sauss. Mon. Guêpes Sol. 170. 59. t. 17. f. 7.

Hab. Chili.

181. Odynerus vespiformis.

Odynerus vespiformis, *Halid. Trans. Linn. Soc.* xvii. 323. 33. (1837).
Odynerus hirsutulus, *Spin. Faun. Chili*, vi. 57. 3.
Sauss. Mon. Guêpes Sol. 212. 118.

Hab. Chili.

182. Odynerus Molinus.

Odynerus Molinus, *Sauss. Mon. Guêpes Sol. Supp.* 262. 3.
Hab. Chili.

183. Odynerus pilosus.

Odynerus pilosus, *Sauss. Mon. Guêpes Sol. Supp.* t. 11. f. 8.
Hab. Peru.

184. Odynerus Peruensis.

Odynerus Peruensis, *Sauss. Mon. Guêpes Sol. Supp.* 253. 129. t. 12. f. 4.
Hab. Peru.

185. Odynerus vestitus.

Odynerus vestitus, *Sauss. Mon. Guêpes Sol. Supp.* 252. 127.
Hab. Peru.

186. Odynerus Alasteroides.

Odynerus Alasteroides, *Sauss. Mon. Guêpes Sol.* 147. 33. t. 16. f. 6.
Hab. Monte Video.

187. Odynerus fastidiosusculus.

Odynerus fastidiosusculus, *Sauss. Mon. Guêpes Sol.* 137. 19.
Hab. Brazil.

188. Odynerus Paraensis.

Odynerus Paraensis, *Sauss. Mon. Guêpes Sol. Supp.* 207. 95.
Hab. Para.

189. Odynerus brachygaster.

Odynerus brachygaster, *Sauss. Mon. Guêpes Sol.* 173. 63. t. 17. f. 8.
Hab. Brazil (Para).

190. Odynerus advena. B.M.

Odynerus advena, *Sauss. Mon. Guêpes Sol. Supp.* 222. 117. t. 11. f. 3, 3 *a*, 3 *b*, 4.
Hab. Brazil.

191. Odynerus pumilus.

Odynerus pumilus, *Sauss. Mon. Guêpes Sol. Supp.* 197. 93.
Hab. Cayenne.

192. Odynerus Columbaris.

Odynerus Columbaris, *Sauss. Mon. Guêpes Sol.* 158. 42. t. 17. f. 3.

Hab. Columbia.

193. Odynerus nasidens.

Odynerus nasidens, *Latr. Voy. aux Rég. Equinox., Humb. et Bonpl.* ii. 112. t. 15. f. 1–2.
Sauss. Mon. Guêpes Sol. 171. 61.

Hab. Columbia.

194. Odynerus brevithorax. B.M.

Odynerus brevithorax, *Sauss. Mon. Guêpes Sol.* 172. 62. t. 17. f. 9.

Hab. South America.

195. Odynerus tibialis.

Odynerus tibialis, *Sauss. Mon. Guêpes Sol.* 183. 78.

Hab. Columbia.

196. Odynerus Romandinus.

Odynerus Romandinus, *Sauss. Mon. Guêpes Sol.* 184. 79.

Hab. Columbia; Venezuela.

197. Odynerus incommodus.

Odynerus incommodus, *Sauss. Mon. Guêpes Sol.* 143. 29.

Hab. Columbia.

198. Odynerus Tarabucensis.

Odynerus Tarabucensis, *Sauss. Mon. Guêpes Sol. Supp.* 250. 125.

Hab. Bolivia.

199. Odynerus præcox.

Odynerus præcox, *Sauss. Mon. Guêpes Sol. Supp.* 254. 130. t. 11. f. 9.

Hab. South America.

200. Odynerus pruinosus. B.M.

Female. Length 6 lines.—Black: in certain lights, covered with fine silvery pile; a stripe at the base of the clypeus, a minute spot between the antennæ and another behind the eyes, white; the head, thorax and base of the abdomen strongly punctured; the anterior margin of the prothorax, a spot beneath the

wings, the anterior and posterior margins of the tegulæ, a spot behind them, the post-scutellum and the lateral margins of the metathorax, a spot at the apex of the anterior femora behind, and the anterior and intermediate tibiæ outside, white; the metathorax truncate, slightly concave, with a central impressed line, on each side of which it is obliquely striated; the wings hyaline, with their margins clouded. The first and second segments of the abdomen with white fasciæ on their apical margins, that on the second continued beneath.

Hab. St. Domingo.

Div. VI.—*Species of North America (Mexico, Carolina, Arctic America, Canada, &c.).*

201. Odynerus tuberculiceps.

Odynerus tuberculocephalus, *Sauss. Mon. Guêpes Sol.* 139. 22.
Odynerus tuberculiceps, *Sauss. Mon. Guêpes Sol. Supp.* 205. 139. t. 16. f. 9.

Hab. Mexico.

202. Odynerus similis. B.M.

Female. Length 4½ lines.—Black: covered with ochraceous pubescence, and having also a clothing of changeable pale golden pile, that on the abdomen very brilliant in some positions; the clypeus truncate at the apex, the lateral angles acute, subdentate; a yellow spot between the antennæ and another at the apex of the clypeus. The thorax slightly narrowed anteriorly and posteriorly; the anterior margin of the prothorax not raised or sharply truncate; the metathorax rounded at the sides and truncate posteriorly and slightly concave; the wings hyaline, the anterior margin of the superior pair yellowish, the nervures ferruginous. Abdomen: the first segment much narrower than the second, strongly punctured, its apical margin marginate; the apical margin of the second and three following segments with a broad yellow fascia; the apical segment yellow with a black spot in the middle of its base; the fasciæ on the segments continued beneath.

Hab. Mexico.

This species closely resembles *Odynerus brevithorax*, but the thorax is not quadrate as in that insect, the metathorax is not widely truncate, nor is the post-scutellum produced at its apical margin: the form and sculpture of the basal segment are very different.

203. Odynerus Catepetlensis.

Odynerus Catepetlensis, *Sauss. Mon. Guêpes Sol. Supp.* 255. 132.

Hab. Mexico.

204. Odynerus symmorphus.

Odynerus symmorphus, *Sauss. Mon. Guêpes Sol. Supp.* 246. 119.

Hab. Florida.

205. Odynerus campestris.

Odynerus campestris, *Sauss. Mon. Guêpes Sol.* 137. 18 ♀.

Hab. Carolina; Florida.

206. Odynerus adiabatus.

Odynerus adiabatus, *Sauss. Mon. Guêpes Sol.* 138. 20.

Hab. Carolina.

207. Odynerus sæcularis.

Odynerus sæcularis, *Sauss. Mon. Guêpes Sol.* 142. 26.

Hab. Carolina.

208. Odynerus fulvipes. B.M.

Odynerus flavipes, *St. Farg. Hym.* ii. 659. 39.
Sauss. Mon. Guêpes Sol. 142. 27.
Odynerus fulvipes, *Sauss. Mon. Guêpes Sol. Supp.* 205. t. 16. f. 3.

Hab. Carolina.

209. Odynerus quadrisectus. B.M.

Odynerus 4-sectus, *Say, Bost. Journ. Nat. Hist.* i. 385.
Sauss. Mon. Guêpes Sol. Supp. 206. t. 9. f. 9.
Odynerus Bellone, *St. Farg. Hym.* ii. 660. 40.
Sauss. Mon. Guêpes Sol. 146. 32. t. 16. f. 10.

Hab. Carolina.

210. Odynerus Boscii. B.M.

Odynerus Boscii, *St. Farg. Hym.* ii. 637.
Sauss. Mon. Guêpes Sol. 177. 69. t. 17. f. 10.

Hab. Carolina.

211. Odynerus Erynnis.

Odynerus Erynnis, *St. Farg. Hym.* ii. 645.
Sauss. Mon. Guêpes Sol. 178. 70.

Hab. Carolina.

212. Odynerus castigatus.

Odynerus castigatus, *Sauss. Mon. Guêpes Sol.* 178. 71.

Hab. Carolina.

213. Odynerus foraminatus.

Odynerus foraminatus, *Sauss. Mon. Guêpes Sol.* 180. 73.

Hab. Carolina.

214. Odynerus Megæra. B.M.

Odynerus Megæra, *St. Farg. Hym.* ii. 636. 21.
Sauss. Mon. Guêpes Sol. 181. 74. t. 17. f. 11.

Hab. Carolina.

215. Odynerus Tisiphone.

Odynerus Tisiphone, *St. Farg. Hym.* ii. 646.
Sauss. Mon. Guêpes Sol. 183. 77.

Hab. Carolina.

216. Odynerus histrio. B.M.

Odynerus histrio, *St. Farg. Hym.* ii. 638. 23.
Sauss. Mon. Guêpes Sol. 208. 112.

Hab. Carolina.

217. Odynerus birenimaculatus.

Odynerus birenimaculatus, *Sauss. Mon. Guêpes Sol.* 135. 16 ♀.

Hab. Carolina.

218. Odynerus cristatus. B.M.

Odynerus cristatus, *Sauss. Mon. Guêpes Sol. Supp.* 196. 92.

Hab. North America?

219. Odynerus uncinatus. B.M.

Odynerus uncinatus, *Say, Bost. Journ. Nat. Hist.* i. 18. 34. 386.
Odynerus unifasciatus, *Sauss. Mon. Guêpes Sol.* 138. 21.

Hab. North America.

220. Odynerus pedestris.

Odynerus fuscipes, *Sauss. Mon. Guêpes Sol.* 143. 28 (nec *Herr.-Schæff.*).
Odynerus pedestris, *Sauss. Mon. Guêpes Sol. Supp.* 206.

Hab. North America.

221. Odynerus Ammonis. B.M.

Odynerus ammonia, *Sauss. Mon. Guêpes Sol.* 144. 30.

Hab. North America; Carolina.

222. Odynerus Spinolæ.

Odynerus Spinolæ, *Sauss. Mon. Guêpes Sol. Supp.* 216. 107.

Hab. Philadelphia.

223. Odynerus pertinax. B.M.

Odynerus pertinax, *Sauss. Mon. Guêpes Sol. Supp.* 216. 108.

Hab. United States (New York).

224. Odynerus conformis.

Odynerus conformis, *Sauss. Mon. Guêpes Sol. Supp.* 219. 112.

Hab. Louisiana; New Orleans.

225. Odynerus oculatus.

Odynerus oculatus, *Say, Bost. Journ. Nat. Hist.* i. 385.
Sauss. Mon. Guêpes Sol. Supp. 219. 113.

Hab. North America (Ohio; Missouri).

226. Odynerus luctuosus.

Odynerus luctuosus, *Sauss. Mon. Guêpes Sol. Supp.* 220. 114.

Hab. North America; South Carolina.

227. Odynerus diabolicus.

Odynerus diabolicus, *Sauss. Mon. Guêpes Sol.* 171. 60.

Hab. North America.

228. Odynerus rugosus.

Odynerus rugosus, *Sauss. Mon. Guêpes Sol.* 179. 72.

Hab. North America.

229. Odynerus leucomelas. B.M.

Odynerus leucomelas, *Sauss. Mon. Guêpes Sol. Supp.* 255. 131.

Hab. North America (New York).

230. Odynerus persecutor.

Odynerus persecutor, *Sauss. Mon. Guêpes Sol. Supp.* 256. 133. t. 14. f. 1.

Hab. North America.

231. Odynerus Pennsylvanicus.

Odynerus Pensylvanicus, *Sauss. Mon. Guêpes Sol. Supp.* 257. 134.

Hab. North America.

232. Odynerus Catskillensis.

Odynerus Catskill, *Sauss. Mon. Guêpes Sol.* 136. 17. *& Supp.* 204. 136. t. 16. f. 8.

Hab. North America (Catskill).

233. Odynerus albomarginatus. B.M.

Odynerus albomarginatus, *Sauss. Mon. Guêpes Sol. Supp.* 195. 90.

Hab. Hudson's Bay.

234. Odynerus Guadulpensis.

Odynerus Guadulpensis, *Sauss. Mon. Guêpes Sol.* 182. 76.
Odynerus Cubensis, *Sauss. Mon. Guêpes Sol.* 181. 75?

Hab. Guadaloupe.

235. Odynerus Canadensis. B.M.

Odynerus Canadensis, *Sauss. Mon. Guêpes Sol. Supp.* 196. 91.

Hab. Canada.

236. Odynerus Sylveiræ.

Odynerus Sylveiræ, *Sauss. Mon. Guêpes Sol. Supp.* 217. 110. t. 10. f. 8.

Hab. Arctic America.

237. Odynerus albophaleratus. B.M.

Odynerus albophaleratus, *Sauss. Mon. Guêpes Sol. Supp.* 217. 109.

Hab. Arctic America.

238. Odynerus figulus.

Odynerus figulus, *Sauss. Mon. Guêpes Sol. Supp.* 247. 120.

Hab. Guadaloupe.

239. Odynerus Enyo.

Odynerus elegans, *Guérin, Icon. Règn. Anim. Ins.* t. 70. f. 5.
Odynerus Enyo, *St. Farg. Hym.* ii. 648. 33.
Sauss. Mon. Guêpes Sol. 185. 81.

Hab. Cuba; Peru.

240. Odynerus Bacuensis.

Odynerus Bacu, *Sauss. Mon. Guêpes Sol.* 185. 80. & *Supp.* 232.
Hab. Cuba.

241. Odynerus Cubensis.

Odynerus Cubensis, *Sauss. Mon. Guêpes Sol.* 181. 75. t. 18. f. 8.
Hab. Cuba.

242. Odynerus simplicicornis.

Odynerus simplicicornis, *Sauss. Mon. Guêpes Sol. Supp.* 253. 128.
Hab. Cuba.

243. Odynerus velox.

Odynerus velox, *Sauss. Mon. Guêpes Sol.* 228. 136.
Hab. ——?

244. Odynerus bipustulatus.

Vespa biguttata, *Fabr. Mant. Ins.* i. 291. 53; *Ent. Syst.* ii. 272. 68; *Syst. Piez.* 267. 72?
Oliv. Encycl. Méth. vi. 689. 99.
Odynerus bipustulatus, *Sauss. Mon. Guêpes Sol. Supp.* 277. 158. t. 12. f. 10.
Hab. China. (Mus. Paris.)

Genus 16. LEPTOCHILUS.

Discœlius, pt., *Brullé, Hist. Nat. Il. Canar.* pt. 2. 98 (1832).
Odynerus, pt., *St. Farg. Hym.* ii. 675 (1841).
Pterochilus, pt., *St. Farg. Hym.* ii. 675 (1841).
Leptochilus, *Sauss. Mon. Guêpes Sol.* 233 (1852).

1. Leptochilus Oraniensis. B.M.

Odynerus Oraniensis, *St. Farg. Hym.* ii. 640. 25.
Lucas, Explo. Sc. Algér. iii. 237. t. 11. f. 10.
Leptochilus Oraniensis, *Sauss. Mon. Guêpes Sol.* 236. 5.
Hab. Algeria (Oran).

2. Leptochilus ornatus.

Leptochilus ornatus, *Sauss. Mon. Guêpes Sol.* 236. 6.
Hab. Carolina.

3. Leptochilus fallax.

Leptochilus fallax, *Sauss. Mon. Guêpes Sol.* 234. 2.

Hab. North America.

4. Leptochilus Mauritanicus.

Pterochilus mauritanicus, *St. Farg. Hym.* ii. 675. 4.
Lucas, Explo. Sc. Algér. iii. 242. t. 7. f. 2.
Leptochilus mauritanicus, *Sauss. Mon. Guêpes Sol.* 233. 1.

Hab. Algeria.

5. Leptochilus cruentatus.

Discœlius cruentatus, *Brullé, Hist. Nat. Il. Canar.* pt. 2. 98. t. 3. f. 15.

Hab. Canary Islands.

6. Leptochilus modestus.

Leptochilus modestus, *Sauss. Mon. Guêpes Sol.* 234. 2.

Hab. Algeria.

7. Leptochilus denticulatus. B.M.

Leptochilus denticulatus, *Sauss. Rev. et Mag. Zool.* p. 173 (1855).

Hab. Mexico.

Genus 17. PTEROCHILUS.

Vespa, pt., *Panz. Faun. Germ.* fasc. 47.
Pterochilus, *Klug, Beitr. z. Naturk. v. Weber u. Mohr*, i. 154.

1. Pterochilus glabripalpis.

Pterochilus glabripalpis, *Sauss. Mon. Guêpes Sol.* 239. 1.

Hab. Senegal.

2. Pterochilus latipalpis.

Pterochilus latipalpis, *St. Farg. Hym.* ii. 678. 7.
Sauss. Mon. Guêpes Sol. 240. 2.

Hab. Crimea.

3. Pterochilus Pallasii.

Pterochilus Pallasii, *Klug, Beitr. z. Naturk. v. Weber u. Mohr*, i. 150. t. 3. f. 1–3.
Sauss. Mon. Guêpes Sol. 241. 3.

Hab. Russia; Asia Minor; Smyrna.

4. PTEROCHILUS UNIPUNCTATUS. B.M.

Pterochilus unipunctatus, *St. Farg. Hym.* ii. 676. 5.
Lucas, Explo. Sc. Algér. iii. 243. t. 12. f. 3.
Sauss. Mon. Guêpes Sol. 242. 4.

Hab. Algeria.

5. PTEROCHILUS ORNATUS.

Pterochilus ornatus, *St. Farg. Hym.* ii. 677. 6.
Lucas, Explo. Sc. Algér. iii. 243. t. 12. f. 4.
Sauss. Mon. Guêpes Sol. 242. 5.

Hab. Algeria.

6. PTEROCHILUS PHALERATUS. B.M.

Vespa phalerata, *Panz. Faun. Germ.* 47. 21.
Pterochilus phaleratus, *Klug, Beitr. z. Naturk. v. Weber u. Mohr,* i. 154.
Latr. Gen. Crust. et Ins. iv. 139.
Herr.-Schæff. Faun. Germ. 173. 16–18.
St. Farg. Hym. ii. 673. 3.
Sauss. Mon. Guêpes Sol. 243. 6.

Hab. Europe.

7. PTEROCHILUS BIGLUMIS.

Pterochilus biglumis, *Sauss. Mon. Guêpes Sol.* 243. 7.

Hab. Cape of Good Hope.

8. PTEROCHILUS MAJOR.

Pterochilus major, *Sauss. Mon. Guêpes Sol.* 244. 8.

Hab. Cape of Good Hope.

9. PTEROCHILUS NUMIDA.

Pterochilus numida, *St. Farg. Hym.* ii. 672. 2.
Lucas, Explo. Sc. Algér. iii. 241. t. 7. f. 5.
Sauss. Mon. Guêpes Sol. 245. 9.

Hab. Algeria.

10. PTEROCHILUS CHEVRIERANUS.

Pterochilus Chevrieranus, *Sauss. Mon. Guêpes Sol. Supp.* 322. 208 ♀ ♂.

Hab. Switzerland.

11. Pterochilus grandis.

Pterochilus grandis, *St. Farg. Hym.* ii. 671. 1.
Lucas, Explo. Sc. Algér. iii. 241. t. 12. f. 1.
Sauss. Mon. Guêpes Sol. 246. 10.

Hab. Algeria.

12. Pterochilus interruptus.

Pterochilus interruptus, *Klug, Beitr. z. Naturg. v. Weber u. Mohr*, i. 152.
Sauss. Mon. Guêpes Sol. 246. 11.

Hab. Algeria.

13. Pterochilus pilipalpus.

Epipona pilipalpa, *Spin. Faun. Chili, Zool.* vi. 252.
Pterochilus pilipalpus, *Sauss. Mon. Guêpes Sol.* 247. 12.

Hab. Chili.

14. Pterochilus quinquefasciatus.

Pterochilus quinquefasciatus, *Say, Exped. Source St. Peter's River*, ii. *Supp.* 79.
Sauss. Mon. Guêpes Sol. 248. 13.

Hab. United States (Missouri).

15. Pterochilus Capensis.

Pterochilus Capensis, *Sauss. Mon. Guêpes Sol. Supp.* 323. 209. t. 15. f. 11 ♀.

Hab. Cape of Good Hope.

16. Pterochilus insignis. B.M.

Pterochilus insignis, *Sauss. Mon. Guêpes Sol. Supp.* 324. 210. t. 15. f. 12 ♀ ♂.

Hab. Cape of Good Hope; South Africa. (Coll. Dr. A. Smith.)

Genus 18. ALASTOR.

Odynerus, pt., *Guér. Voy. Coq. Ins.* ii. 266 (1830).
Alastor, *St. Farg. Hym.* ii. 668 (1841).

1. Alastor Atropos.

Alastor Atropos, *St. Farg. Hym.* ii. 669. 2.
Sauss. Mon. Guêpes Sol. 257. 12.
Descr. Egypt. (*Savigny*) *Hym.* t. 9. f. 16.

Hab. France (Paris and St. Lever).

2. Alastor lucida.

Alastor lucida, *Sauss. Mon. Guêpes Sol.* 257. 13.

Hab. ——?

3. Alastor angusticollis.

Alastor angusticollis, *Spin. Faun. Chili, Zool.* vi. 261.
Sauss. Mon. Guêpes Sol. 258. 14.

Hab. Chili.

4. Alastor melanosoma.

Alastor melanosoma, *Sauss. Mon. Guêpes Sol.* 259. 15.

Hab. Brazil.

5. Alastor singularis.

Alastor singularis, *Sauss. Mon. Guêpes Sol.* 259. 16.

Hab. Brazil.

6. Alastor Clotho.

Alastor Clotho, *St. Farg. Hym.* ii. 668. 1.
Sauss. Mon. Guêpes Sol. 250. 1.

Hab. New Holland.

7. Alastor Australis.

Alastor Australis, *Sauss. Mon. Guêpes Sol.* 250. 2.

Hab. New Holland.

8. Alastor eriurgus.

Alastor eriurgus, *Sauss. Mon. Guêpes Sol.* 251. 4.

Hab. New Holland.

9. Alastor aureocinctus. B.M.

Odynerus aureocinctus, *Guér. Voy. de la Coq. Zool.* 266. t. 9. f. 4.
Alastor aureocinctus, *Sauss. Mon. Guêpes Sol.* 252. 5.

Hab. New Holland.

10. Alastor Parca.

Alastor parca, *Sauss. Mon. Guêpes Sol.* 254. 9.

Hab. New Holland.

11. Alastor similis.

Alastor similis, *Sauss. Mon. Guêpes Sol.* 256. 11.

Hab. New Holland.

12. ALASTOR ARGENTIFRONS. B.M.

Female. Length 5½ lines.—Black: the head and thorax coarsely punctured; the clypeus much longer than broad, its apical margin obtusely emarginate; a minute spot behind the eyes, a spot between the antennæ and the clypeus, orange-red; the margins of the clypeus, a spot at its base, and an abbreviated line in the middle at its apex, black; the sides of the clypeus and inner orbit of the eyes with a glittering silvery pubescence. Thorax: an orange spot on each side of the prothorax in front; the knees, tibiæ and tarsi ferruginous; the wings fusco-hyaline, darkest along the anterior margin of the superior pair; the thorax beneath, the femora and abdomen beneath, covered with a fine silky silvery pubescence. Abdomen with an orange band on the apical margin of the first segment, which is recurved on each side; the rest of the abdomen orange-red above, with a large subangular black spot at the base of the second segment extending to two-thirds of its length; beneath, the first and second segments black, the second with an orange fascia on its apical margin suddenly widened on each side; the following segments have their apical margins yellowish.

Hab. Australia.

13. ALASTOR CARINATUS.

Female. Length 6 lines.—Black: the head and thorax coarsely punctured; the clypeus longer than broad, slightly reflexed at the apex, which is truncate; above and between the antennæ is a short carina; a minute orange spot behind the eyes. Thorax: a minute orange spot on each side of the posterior margin of the prothorax; the wings fuscous, darkest along the anterior margin of the superior pair; the knees and the tibiæ ferruginous, the latter dusky outside; the metathorax truncate, the truncation slightly concave, with an impressed longitudinal line in the middle. Abdomen: the first segment truncate at the base, with a slight carina at the verge of the truncation, which is rugose; the first segment with an orange band on its apical margin, widest and notched in the middle and emarginate on each side; the other segments yellow; the base of the second segment black at the base, forming an angular shape in the middle, and with a square notch on each side; beneath, tuberculate in the middle of its base.

Hab. Adelaide. (Coll. F. Smith.)

This species is allied to the *A. aureocinctus* of Guérin, which has the basal segment of the abdomen truncate; but that insect has the clypeus bidentate at the apex, and has also a minute

tooth in the middle between the lateral ones, independent of the difference of coloration.

14. Alastor Lachesis.

Alastor Lachesis, *Sauss. Mon. Guêpes Sol.* 251. 3.

Hab. Tasmania.

15. Alastor Tasmaniensis.

Alastor Tasmaniensis, *Sauss. Mon. Guêpes Sol.* 253. 6.

Hab. Tasmania.

16. Alastor tuberculatus.

Alastor tuberculatus, *Sauss. Mon. Guêpes Sol.* 253. 7.

Hab. Tasmania.

17. Alastor emarginatus.

Alastor emarginatus, *Sauss. Mon. Guêpes Sol.* 254. 8.

Hab. Tasmania.

18. Alastor punctulatus.

Alastor punctulatus, *Sauss. Mon. Guêpes Sol.* 255. 10.

Hab. Tasmania.

19. Alastor Picteti.

Alastor Picteti, *Sauss. Mon. Guêpes Sol.* 256. 12.

Hab. Tasmania.

20. Alastor albocinctus. B.M.

Male. Length 5 lines.—Black: the head and thorax roughly punctured; a minute spot behind the eyes and the clypeus white; the anterior margin of the latter truncate, straight. An elongate spot on each side of the posterior margin of the prothorax, a spot beneath the wings, and a minute one on each side of the scutellum, white; the wings subhyaline, with the anterior margin of the superior pair darkest; the scale black, the tibiæ and tarsi ferruginous. Abdomen: the basal segment much narrower than the second and with a few scattered punctures; the apical margins of the first and second segments with a narrow white band.

Hab. Tasmania.

This is probably the male of *A. punctulatus*, which it closely resembles, and with which it agrees in having the anterior margin of the clypeus straight.

Group 2. Social Wasps.

Family 3. VESPIDÆ, *Steph.*

This group is distinguished by the intermediate and posterior tibiæ having two spines at their apex, and by the claws of the tarsi being simple.

Vespariæ, *Latr. Hist. Nat.* (1802).
Vespides, *Leach, Edinb. Encycl.* (1812).
Vespida, *Steph. Syst. Cat.* (1829).
Vespina et Vespites, *Newm. Ent. Mag.* (1834).

Genus 1. ISCHNOGASTER.

Ischnogaster, *Guér. Voy. Coq. Ins.* 269 (1838).

1. Ischnogaster fulgipennis.

Ischnogaster fulgipennis, *Guér. Voy. Coq. Ins.* 269.
Sauss. Mon. Guêpes Soc. 7. 1; *Ann. Soc. Ent. Fr.* 2nd ser. x. 23.
Stenogaster fulgipennis, *Guér. Voy. Coq. Ins.* t. 9. f. 9.

Hab. New Guinea.

2. Ischnogaster micans. B.M.

Ischnogaster micans, *Sauss. Ann. Soc. Ent. Fr.* 2nd ser. x. 24; *Mon. Guêpes Soc.* 8. 2.

Hab. Java; Borneo (Sarawak). (Coll. A. Wallace.)

3. Ischnogaster Mellyi.

Ischnogaster Mellyi, *Sauss. Ann. Soc. Ent. Fr.* 2nd ser. x. 25. t. 2. f. 1; *Mon. Guêpes Soc.* 9. 3.

Hab. Java.

4. Ischnogaster cilipennis. B.M.

Male. Length 5¼ lines.—Black: the head smooth and shining; the clypeus prolonged into an acute point at the apex; the mandibles, organs of the mouth, extreme apex of the clypeus, the scape in front, the flagellum beneath and its three apical joints outside, of a pale yellowish-white; a broad yellow fascia on the front, crossing at the emargination of the eyes, its upper margin curved on each side, the curves meeting in front of the anterior ocellus; its lower margin irregularly notched. Thorax: the lateral hinder margins of the prothorax have a narrow border of yellow, which runs to the tegulæ; the anterior margin of the

latter, and a spot beneath the wings, yellow; the legs pale rufo-testaceous; the coxæ outside, the apex of the femora, and the anterior and intermediate tibiæ in front, yellow; the posterior tibiæ and tarsi, and also the intermediate tarsi, thinly fringed outside with long fine hairs; the anterior tibiæ have a row of spines or hairs which are thickened at their apex, forming clavate appendages; the scutellum, post-scutellum, and a longitudinal stripe, the width of the scutellum, on the metathorax, white; the wings subhyaline and splendidly iridescent; the hinder wings with a fringe of fine long hairs on their posterior margin. The petiole of the abdomen above, a transverse stripe at the base of the fifth and sixth segments, and the seventh entirely, yellow; a minute lateral spot on the third segment, and all the segments with a spot on each side beneath.

Hab. Malacca (Mount Ophir). (Coll. A. Wallace.)

5. ISCHNOGASTER NITIDIPENNIS.

Ischnogaster nitidipennis, *Sauss. Mon. Guêpes Soc.* 10. 4.

Hab. Cayenne.

Genus 2. BELONOGASTER.

Vespa, pt., *Fabr. Ent. Syst.* ii. 279 (1793).
Zethus, pt., *Fabr. Syst. Piez.* 282 (1804).
Raphigaster, *Sauss. Mon. Guêpes Soc.* 12 (1853): nec *Lap.* (*Hemip.*) 1833.
Belonogaster, *Sauss. Mon. Guêpes Soc. Append.* (1853).
Sphex, pt., *De Geer, Mem.* vi. (1773).

1. BELONOGASTER JUNCEUS. B.M.

Vespa juncea, *Fabr. Mant. Ins.* i. 293. 73; *Ent. Syst.* ii. 277. 85. *Oliv. Encycl. Méth. Ins.* vi. 673.
Vespa Guineensis, *Fabr. Ent. Syst.* ii. 277. 85.
Vespa cinerea, *Fabr. Ent. Syst.* ii. 279. 92.
Zethus Guineensis, *Fabr. Syst. Piez.* 283. 2.
Zethus cinereus, *Fabr. Syst. Piez.* 283. 3.
Raphigaster junceus, *Sauss. Mon. Guêpes Soc.* 14. 1. t. 2. f. 2.

Hab. Africa (Congo; Senegal; Abyssinia).

2. BELONOGASTER RUFIPENNIS. B.M.

Sphex rufipennis, *De Geer, Mém. Ins.* vii. 611. t. 45. f. 10.
Vespa macilenta, *Fabr. Spec. Ins.* i. 468. 61? *Mant. Ins.* i. 293. 74; *Ent. Syst.* ii. 280. 93.
Sphex dimidiata, *Christ. Hym.* 313. t. 31. f. 4.
Raphigaster rufipennis, *Sauss. Mon. Guêpes Soc.* 15. 2.

Hab. Africa.

3. Belonogaster griseus. B.M.

Vespa grisea, *Fabr. Syst. Ent.* 372. 43; *Spec. Ins.* i. 468. 59; *Mant. Ins.* i. 293. 72; *Ent. Syst.* ii. 279. 91.
Oliv. Encycl. Méth. vi. 672.
Sphex grisea, *Christ. Hym.* 313.

Hab. Africa (Senegal; Sierra Leone; Whydah).

An examination of the typical specimen of this species satisfactorily proves that it cannot be regarded as a variety of *B. rufipennis*; the petiole in this species being considerably longer and more slender. Specimens from Whydah have the wings very dark brown, or nearly black.

4. Belonogaster Madecassus.

Raphigaster Madecassus, *Sauss. Mon. Guêpes Soc.* 16. 3.

Hab. Madagascar.

5. Belonogaster filiventris.

Raphigaster filiventris, *Sauss. Mon. Guêpes Soc.* 16. 4.

Hab. Senegal.

6. Belonogaster Guerini. B.M.

Raphigaster Guerini, *Sauss. Mon. Guêpes Soc.* 17. 5. t. 2. f. 3.

Hab. Madagascar; Sierra Leone. (Coll. Rev. D. F. Morgan.)

7. Belonogaster indicus.

Raphigaster indicus, *Sauss. Mon. Guêpes Soc.* 17. 6.

Hab. India.

8. Belonogaster macilentus. B.M.

Raphigaster filiformis, *Sauss. Mon. Guêpes Soc.* 13. 7. t. 2. f. 4.
Zethus macilentus, *Fabr. Syst. Piez.* 283. 4. (var.)

Hab. Arabia (Djidda); Port Natal.

Genus 3. MISCHOCYTTARUS.

Zethus, pt., *Fabr. Syst. Piez.* 282 (1804).
Mischocyttarus, *Sauss. Mon. Guêpes. Soc.* 19 (1854).

1. MISCHOCYTTARUS LABIATUS. B.M.

Zethus labiatus, *Fabr. Syst. Piez.* 284. 6.
Mischocyttarus labiatus, *Sauss. Mon. Guêpes Soc.* 20. 1. t. 3. f. 8.

Hab. Cayenne; Brazil (Villa Nova on the Amazons). (Coll. H. W. Bates.)

2. MISCHOCYTTARUS SMITHII. B.M.

Mischocyttarus Smithii, *Sauss. Mon. Guêpes Soc.* 21. 2.

Hab. Brazil.

Genus 4. ICARIA.

Vespa, pt., *Fabr. Ent. Syst.* ii. 253 (1793).
Polistes, pt., *Fabr. Syst. Piez.* 269 (1804).
Rhopalidia, *Guér. Voy. de la Coq. Zool.* ii. (1830).
Epipona, *St. Farg. Hym.* i. 540 (1836).
Icaria, *Sauss. Mon. Guêpes Soc.* 22 (1853).

DIV. I.—*Species of New Guinea and Madagascar.*

1. ICARIA MACULIVENTRIS.

Rhopalidia maculiventris, *Guér. Voy. de la Coq. Zool.* ii. pt. 2. *Ins.* 267. t. 9. f. 8.
Icaria maculiventris, *Sauss. Mon. Guêpes Soc.* 23. 1.

Hab. New Guinea.

2. ICARIA AUSTRALIS.

Icaria Australis, *Sauss. Mon. Guêpes Soc.* 24. 2.

Hab. New Guinea.

3. ICARIA REACTIONALIS.

Icaria reactionalis, *Sauss. Mon. Guêpes Soc.* 28. 6.

Hab. New Guinea.

4. ICARIA CONSTITUTIONALIS.

Icaria constitutionalis, *Sauss. Mon. Guêpes Soc.* 30. 8. t. 4. f. 4.

Hab. Madagascar.

5. ICARIA POMICOLOR.

Icaria pomicolor, *Sauss. Mon. Guêpes Soc.* 32. 9. t. 5. f. 3.

Hab. Madagascar.

6. Icaria dubia.
Icaria dubia, *Sauss. Mon. Guêpes Soc.* 33. 10.
Hab. Madagascar.

7. Icaria democratica.
Icaria democratica, *Sauss. Mon. Guêpes Soc.* 33. 11.
Hab. Madagascar.

8. Icaria anarchica.
Icaria anarchica, *Sauss. Mon. Guêpes Soc.* 34. 12. t. 5. f. 4.
Hab. Madagascar.

9. Icaria phalansterica.
Icaria phalansterica, *Sauss. Mon. Guêpes Soc.* 35. 13. t. 4. f. 5.
Hab. Madagascar.

10. Icaria galimatia.
Icaria galimatia, *Sauss. Mon. Guêpes Soc.* 36. 14.
Hab. Madagascar.

Div. II.—*Species of Australia and Tasmania.*

11. Icaria? Romandi.
Polistes Romandi, *Guillou, Ann. Soc. Ent. Fr.* 1st ser. x. 322.
Icaria? Romandi, *Sauss. Mon. Guêpes Soc.* 41. 6.
Hab. Australia.

12. Icaria revolutionalis.
Icaria revolutionalis, *Sauss. Mon. Guêpes Soc.* 29. 7. t. 5. f. 7.
Hab. New Holland or Tasmania.

13. Icaria Cabeti.
Icaria cabeti, *Sauss. Mon. Guêpes Soc.* 26. 4. t. 5. f. 2.
Hab. Tasmania.

14. Icaria socialistica. B.M.
Icaria socialistica, *Sauss. Mon. Guêpes Soc.* 27. 5.
Hab. Tasmania.

Div. III.—*Species of Africa.*

15. Icaria cincta. B.M.

Epipona cincta, *St. Farg. Hym.* i. 541. 2.
Icaria cincta, *Sauss. Mon. Guêpes Soc.* 39. 18. t. 5. f. 9.
Hab. Senegal; Sierra Leone. (Coll. The Rev. D. F. Morgan.)

16. Icaria guttatipennis. B.M.

Icaria guttatipennis, *Sauss. Mon. Guêpes Soc.* 40. 19. t. 5. f. 8.
Hab. Senegal; Port Natal; the Gambia.

17. Icaria politica.

Icaria politica, *Sauss. Mon. Guêpes Soc. Append.* 240 ♀ ♂.
Hab. Senegal.

18. Icaria clavata.

Icaria clavata, *Sauss. Mon. Guêpes Soc.* 40. 20.
Hab. Cape of Good Hope.

Div. IV.—*Species of India, East India Islands and China.*

19. Icaria aristocratica.

Icaria aristocratica, *Sauss. Mon. Guêpes Soc.* 37. 15.
Hab. India.

20. Icaria ferruginea. B.M.

Vespa ferruginea, *Fabr. Ent. Syst.* ii. 280. 95.
Polistes ferruginea, *Fabr. Syst. Piez.* 277. 39.
Icaria ferruginea, *Sauss. Mon. Guêpes Soc.* 38. 17. t. 5. f. 6.
Hab. India (Madras). (Coll. Walter Elliot, Esq.)

21. Icaria marginata. B.M.

Epipona marginata, *St. Farg. Hym.* i. 541. 3.
Icaria marginata, *Sauss. Mon. Guêpes Soc.* 237.
Hab. India (Madras). (Coll. Walter Elliot, Esq.)

22. Icaria variegata. B.M.

Epipona variegata, *Smith, Ann. & Mag. Nat. Hist.* 2nd ser. ix. 48 (1852).
Icaria variegata, *Sauss. Mon. Guêpes Soc.* 237.
Hab. India (Poonah).

23. Icaria pendula. B.M.

Female. Length 3½ lines.—Ferruginous: covered with a fine short hoary down; the mandibles, a broad stripe behind the eyes, the clypeus, the face as high as the insertion of the antennæ, and the scape in front, yellow; the clypeus with a ferruginous stripe down the centre. Thorax: the anterior and posterior margins of the prothorax, the tegulæ, the basal and lateral margins of the scutellum, the post-scutellum, two broad longitudinal lines on the metathorax, and the breast and legs variegated with yellow; the wings hyaline, with a dark fuscous spot at the apex of the marginal cell. Abdomen: a narrow yellow fascia at the apical margin of the first segment; a large yellow macula on each side of the second at its base, and a broad fascia on its apical margin; the following segments sometimes with yellow fasciæ, sometimes immaculate, very variable in this respect.

Var. The yellow line at the base of the scutellum sometimes interrupted.

Hab. India (Bareily). (Coll. C. Horne, Esq.)

This species closely resembles *Icaria variegata*, but it differs in having the petiole of the abdomen shorter, and in having only the margins of the scutellum yellow; a number of specimens with their nest having been examined and the above differences found to be constant.

24. Icaria formosa. B.M.

Icaria formosa, *Sauss. Mon. Guêpes Soc.* 37. 16.

Hab. India.

25. Icaria artifex. B.M.

Icaria variegata, *Sauss. Mon. Guêpes Soc.* 25. 3. t. 4. f. 3 (nec *Smith*).

Hab. Java; India.

26. Icaria Sumatræ.

Vespa Sumatræ, *Weber, Obs. Entom.* 103. 1.
Vespa mutillata, *Illig. Mag. Ins.* i. 189. 19.
Polistes pubescens, *Fabr. Syst. Piez.* 279. 49.
Icaria Sumatræ, *Sauss. Mon. Guêpes Soc. Append.* 241.

Hab. Sumatra.

27. Icaria speciosa. B.M.

Icaria speciosa, *Sauss. Rev. Zool.* (1855) p. 374.

Hab. Sumatra; Malacca; Borneo. (Coll. A. Wallace.)

The specimens received from Borneo have the basal segment of the abdomen black.

28. Icaria opulenta. B.M.

Female. Length 6–6½ lines.—Black, and covered with a fine short changeable silky pile; the anterior margin of the clypeus angular, and bordered with white; a white spot at the base of the mandibles; the antennæ obscurely ferruginous beneath. The metathorax with a deeply impressed line in the middle and more or less ferruginous towards the apex; the wings subhyaline, with a fuscous stain along the anterior margin of the superior pair, which are also clouded at their apex, the marginal cell darkly so. The first and second segments of the abdomen ferruginous; the apical margins of the following segments obscurely rufo-testaceous.

Hab. Borneo (Sarawak). (Coll. A. Wallace.)

29. Icaria flavo-picta. B.M.

Female. Length 3½ lines.—Black: the mandibles, clypeus, a broad stripe at the inner orbits of the eyes terminating at their emargination, an interrupted line behind the eyes, and the scape in front, yellow; the flagellum fulvous beneath. The anterior and posterior margins of the prothorax, a spot beneath the wings and a second placed in an oblique direction beneath it, the coxæ, tips of the femora, and the tibiæ outside, yellow; the tegulæ, two longitudinal stripes on the mesothorax, two large ovate spots on the scutellum, the post-scutellum, and the sides of the metathorax, yellow; the wings hyaline and iridescent, the nervures brown; the tarsi rufo-testaceous. Abdomen: the basal segment with an ovate spot on each side at its apex, a waved line on each side of the second segment at its base, its apical margin as well as those of the following segments with a broad fascia, yellow; beneath, the second segment with a yellow spot in the middle at its base.

Hab. Borneo (Sarawak). (Coll. A. Wallace.)

30. Icaria Hongkongensis. B.M.

Icaria Hongkongensis, *Sauss. Mon. Guêpes Soc. Append.* 239 ♀.

Hab. China (Hong Kong).

31. Icaria Philippinensis. B.M.

Icaria Philippinensis, *Sauss. Mon. Guêpes Soc. Append.* 240 ♀.

Hab. Philippine Islands.

32. Icaria Lefebvrei.

Polistes Lefebvrei, *Le Guillou, Ann. Soc. Ent. Fr.* 1 sér. x. 322.

Hab. Triton Bay.

Genus 5. ANTHRENEIDA.

Anthreneida, *White, Ann. & Mag. Nat. Hist.* vii. p. 321 (1841).

1. ANTHRENEIDA CORONATA. B.M.

Anthreneida coronata, *White, Ann. & Mag. Nat. Hist.* vii. p. 321.

Hab. Not known.

Genus 6. POLISTES.

Vespa, pt., *Linn. Faun. Suec.* 418 (1761); *Syst. Nat.* i. (1766). *Fabr. Syst. Ent.* 362 (1775); *Ent. Syst.* ii. 253 (1793).
Polistes, *Latr. Hist. Nat. Ins.* xiii. (1804).
Cyclostoma & Gyrostoma, *Kirby, Introd. Ent.* iii. 631 & 633. ed. 5.
Odynerus, pt., *Spin. Ins. Lig.* ii. (1808).

DIV. I.—*Species of Europe.*

1. POLISTES BIGLUMIS. B.M.

Vespa biglumis, *Linn. Faun. Suec.* 418. 1680; *Syst. Nat.* i. 951. 17.
Müller, Linn. Syst. Nat. Ins. ii. 884. 17.
Fabr. Syst. Ent. 373. 48; *Spec. Ins.* i. 469. 67; *Mant. Ins.* 294. 81; *Ent. Syst.* ii. 271. 64; *Syst. Piez.* 264. 63.
Villers, Ent. iii. 271. 13.
Christ. Hym. 245.
Oliv. Encycl. Méth. vi. 692. 115.
Jurine, Hym. 169.
Panz. Faun. Germ. 53. 7.
Vespa parietum, *Scop. Ent. Carn.* no. 827.
Polistes biglumis, *Sauss. Mon. Guêpes Soc.* 46. 1.

Hab. Sweden.

2. POLISTES GALLICUS. B.M.

Vespa gallica, *Linn. Syst. Nat.* i. 949. 7.
Müll. Edit. Linn. Ins. ii. 881. 7.
Fabr. Spec. Ins. i. 460. 10; *Mant. Ins.* i. 287. 11; *Ent. Syst.* ii. 257. 13.
Rossi, Faun. Etrus. ii. 83. 862.
Schrank, Ins. Austr. 789.
Villers, Ent. iii. 266. 5.
Christ. Hym. 233.

Vespa gallica, *Walcken. Faun. Par.* ii. 91.
Latr. Ann. Mus. i. 291.
Spin. Ins. Lig. i. 82, & ii. 183.
Vespa parietum, *Scop. Ent. Carn.* no. 827. var. 1.
Poda, Mus. Græc. 108.
Vespa bimaculata, *Fourc. Ent. Par.* ii. 433. 5.
Vespa dominula, *Christ. Hym.* 229. t. 21. f. 1.
Vespa nimpha, *Christ. Hym.* 232. t. 1. f. 2.
Polistes Gallicus, *Latr. Hist. des Crust. et Ins.* viii. 348.
Panz. Faun. Germ. 49. 22.
St. Farg. Encycl. Méth. x. 172. 6; *Hym.* i. 527. t. 9. f. 4, 6.
Blanch. Règn. An. Illustr. Ins. t. 124. f. 6; *Hist. des Ins.* i. 66. t. 2. f. 6, 7.
Sauss. Mon. Guêpes Soc. 48. 2.
Polistes Lefebvrii, *Guérin, Icon. Règn. An. Ins.* 447. t. 72. f. 6.
Polistes pectoralis, *Herr.-Schæff. Faun. Germ.* 179. t. 6. f. 39.
Polistes Italica, *Herr.-Schæff. Faun. Germ.* p. 39.
Réaum. Mém. Ins. vi. t. 25. f. 6.
Savigny, Descr. de l'Egypt. Hym. t. 8. f. 2.

Hab. Europe; Egypt.

3. Polistes diadema. B.M.

Vespa diadema, *Latr. Ann. Mus.* i. 292. t. 21. f. 4–6.
Polistes diadema, *Latr. Hist. des Crust. et Ins.* xiii. 349.
St. Farg. et Serv. Encycl. x. 173. 7.
Herr.-Schæff. Faun. Germ. 179. 40.
St. Farg. Hym. i. 528.
Ménétr. Mém. de l'Acad. Imp. des Sc. de St. Péters. vi. 307. 986.
Sauss. Mon. Guêpes Soc. Append. 243.
Polistes Geoffroyi, *St. Farg. Hym.* i. 527.

Hab. Europe.

4. Polistes Bucharensis.

Polistes Bucharensis, *Ménétr. Mém. de l'Acad. Imp. des Sc. de St. Péters.* vi. 307. 985 (1849).

Hab. Wallachia (Bucharest).

Div. II.—*Species of India and East India Islands.*

5. Polistes hebræus. B.M.

Vespa hebræa, *Fabr. Mant. Ins.* i. 292. 58; *Ent. Syst.* ii. 274. 74.
Oliv. Encycl. Méth. vi. 690. 105.

Polistes hebræa, *Fabr. Syst. Piez.* 273. 21.
St. Farg. Hym. i. 525. 12.
Polistes Macaensis, *Fabr. Syst. Piez.* 272. 12.
Westw. Ins. Ind. 91. t. 57. f. 4.
Vespa undata, *Oliv. Encycl. Méth.* vi. 684. 72.
Polistes hebræus, *Sauss. Mon. Guêpes Soc.* 53. 10.
Hab. India; China; Persia; Isle of France.

6. POLISTES ORIENTALIS. B.M.

Cyclostoma orientalis, *Kirby, Introd. Ent.* iii. 633. ed. 1. ♂.
Gyrostoma orientalis, *Kirby, Introd. Ent.* iii. 631. ed. 5.
Hab. India; China.

7. POLISTES CONFUSUS. B.M.

Polistes orientalis, *St. Farg. Hym.* i. 519 ♀.
Sauss. Mon. Guêpes Soc. 251.
Polistes Schach, *Sauss. Mon. Guêpes Soc.* 50. 3.
Hab. India; China.

The *Polistes confusus* is in all probability the female of *P. orientalis*; all the specimens known which agree with Kirby's insect are males.

8. POLISTES HOPLITES.

Polistes hoplites, *Sauss. Mon. Guêpes Soc.* 55. 11. & p. 255.
Hab. India.

9. POLISTES STIGMA. B.M.

Vespa stigma, *Fabr. Ent. Syst.* ii. 275. 78.
Vespa tamula, *Fabr. Ent. Syst. Supp.* 263. 78.
Polistes tamula, *Fabr. Syst. Piez.* 274. 27.
Polistes stigma, *Fabr. Syst. Piez.* 261. 41.
Sauss. Mon. Guêpes Soc. 64. 21. t. 6. f. 3.
Hab. India; Ceram; Celebes. (Coll. Madame Ida Pfeiffer.)

10. POLISTES SAGITTARIUS. B.M.

Polistes sagittarius, *Sauss. Mon. Guêpes Soc.* 56. 12.

Var. Specimens from Greece have the thorax and second segment of the abdomen ferruginous.

Hab. India; China; Greece.

11. Polistes tenebricosus.

Polistes tenebricosus, *St. Farg. Hym.* i. 529. 17.
Sauss. Mon. Guêpes Soc. 51. 5.

Hab. Java.

12. Polistes maculipennis.

Polistes maculipennis, *Sauss. Mon. Guêpes Soc.* 61. 19. t. 6. f. 4.

Hab. Java.

13. Polistes diabolicus. B.M.

Polistes diabolicus, *Sauss. Mon. Guêpes Soc.* 68. 26. t. 6. f. 7.

Hab. Java; Timor.

14. Polistes callimorphus.

Polistes callimorpha, *Sauss. Mon. Guêpes Soc.* 71. 31. & p. 255. t. 10. f. 1.

Hab. Island of Timor.

15. Polistes lateritius. B.M.

Female. Length 9 lines.—Brick-red: the basal segment of the abdomen, the metathorax, the posterior portion of the metathorax beneath the wings and the intermediate and posterior coxæ, black; a line on the inner orbit of the eyes, a transverse line at the base of the post-scutellum, the filaments on each side of the insertion of the abdomen and an abbreviated longitudinal line on each side of the metathorax, yellow; the posterior margin of the three basal segments of the abdomen with obscure yellow fasciæ; the wings yellowish hyaline.

Male.—Closely resembles the female, but with the face, scape in front and the mandibles, yellowish; the metathorax black only at the apex.

Hab. Ceram.

Div. III.—*Species of China and the Philippines.*

16. Polistes Chinensis. B.M.

Vespa Chinensis, *Fabr. Ent. Syst.* ii. 261. 29.
Polistes Chinensis, *Fabr. Syst. Piez.* 270. 6.
Sauss. Mon. Guêpes Soc. 56. 13. t. 7. f. 2.
Vespa bimaculata, *Oliv. Encycl. Méth.* vi. 678. 46 (var.?).

Hab. China; Hong Kong; North China (Shanghai).

17. Polistes mandarinius. B.M.

Polistes mandarinius, *Sauss. Mon. Guêpes Soc.* 58. 15.

Hab. North China (Shanghai).

18. Polistes sulcatus.

Polistes sulcatus, *Smith, Trans. Ent. Soc. Lond.* new ser. ii. 38. *Sauss. Mon. Guêpes Soc.* 59. 16.

Hab. North China (Ning-Po-Foo).

This may possibly prove to be an extreme variety of *P. orientalis.*

19. Polistes Philippinensis. B.M.

Polistes Philippinensis, *Sauss. Mon. Guêpes Soc.* 58. 14.

Hab. Philippine Islands.

20. Polistes Manillensis. B.M.

Polistes Manillensis, *Sauss. Mon. Guêpes Soc.* 70. 30.

Hab. Philippine Islands.

Div. IV.—*Species of Africa and Madagascar.*

21. Polistes flavipennis.

Polistes flavipennis, *Sauss. Mon. Guêpes Soc.* 52. 7.

Hab. Cape of Good Hope.

22. Polistes rubidus.

Polistes rubidus, *St. Farg. Hym.* i. 523. 8 ♂.
Sauss. Mon. Guêpes Soc. 50. 4.

Hab. Cape of Good Hope.

23. Polistes fastidiosus. B.M.

Polistes fastidiosus, *Sauss. Mon. Guêpes Soc.* 60. 18.

Hab. Gambia. (Coll. Lieut. Rendall.)

24. Polistes Smithii. B.M.

Polistes Smithii, *Sauss. Mon. Guêpes Soc.* 60. 17. t. 7. f. 3.

Hab. Gambia; South Africa. (Coll. Dr. Andrew Smith.) Sierra Leone. (Coll. The Rev. D. F. Morgan.)

25. Polistes marginalis. B.M.

Vespa marginalis, *Fabr. Syst. Ent.* 367. 24; *Spec. Ins.* i. 463. 29; *Mant. Ins.* i. 289. 34; *Ent. Syst.* ii. 264. 42.
Christ. Hym. 240.
Oliv. Encycl. Méth. vi. 685. 79.
Polistes marginalis, *Fabr. Syst. Piez.* 272. 17.
Sauss. Mon. Guêpes Soc. 62. 20. t. 6. f. 2.
Polistes Africana, *Palis. de Beauv. Ins. d'Afr. et d'Amér.* 207. t. 8. f. 4.
Polistes ornata, *St. Farg. Hym.* i. 531. 19.

Hab. Africa; South Africa. (Coll. Dr. Andrew Smith.) Sierra Leone. (Coll. The Rev. D. F. Morgan.)

26. Polistes Madecassus.

Polistes Madecassus, *Sauss. Mon. Guêpes Soc.* 51. 6.

Hab. Madagascar.

Div. V.—*Species of Australia and Tasmania.*

27. Polistes Schach.

Vespa Schach, *Fabr. Spec. Ins.* i. 461. 18; *Mant. Ins.* i. 288. 21; *Ent. Syst.* ii. 260. 25.
Oliv. Encycl. Méth. vi. 682. 60.
Polistes Schach, *Fabr. Syst. Piez.* 270. 2.
Sauss. Mon. Guêpes Soc. 50. 3.

Hab. New Holland.

28. Polistes facilis.

Polistes facilis, *Sauss. Mon. Guêpes Soc.* 53. 9.

Hab. New Holland.

29. Polistes synœcus.

Polistes synœcus, *Sauss. Mon. Guêpes Soc.* 65. 22. t. 6. f. 5.

Hab. New Holland.

30. Polistes Tasmaniensis. B.M.

Polistes Tasmaniensis, *Sauss. Mon. Guêpes Soc.* 66. 23. t. 6. f. 6.

Hab. New Holland (Hunter River).

31. Polistes variabilis.

Vespa variabilis, *Fabr. Ent. Syst.* ii. 274. 73.
Oliv. Encycl. Méth. vi. 690. 104.
Polistes variabilis, *Fabr. Syst. Piez.* 273. 20.
Sauss. Mon. Guêpes Soc. 66. 24.

Hab. New Holland. (Coll. Banks. Mus. Linn. Soc.)

32. Polistes tricolor. B.M.

Polistes tricolor, *Sauss. Mon. Guêpes Soc.* 67. 25.

Hab. New Holland.

33. Polistes tepidus. B.M.

Vespa tepida, *Fabr. Syst. Ent.* 366. 17; *Spec. Ins.* i. 462. 21; *Ent. Syst.* ii. 262. 31; *Mant. Ins.* i. 289.
Christ. Hym. 242.
Oliv. Encycl. Méth. vi. 682. 64.
Polistes tepida, *Fabr. Syst. Piez.* 271. 7.
Polistes tepidus, *Sauss. Mon. Guêpes Soc.* 68. 27. t. 8. f. 1.

Hab. New Holland; New Guinea; Solomon Islands. (Voyage of H.M.S. Herald.)

34. Polistes Picteti. B.M.

Polistes Picteti, *Sauss. Mon. Guêpes Soc.* 69. 28. t. 6. f. 8.

Hab. New Holland; Ceram. (Coll. Madame Ida Pfeiffer.)

35. Polistes Bernardii.

Polistes Bernardii, *Guillou, Ann. Soc. Ent. Fr.* 1st ser. x. 321.
Sauss. Mon. Guêpes Soc. 70. 29.

Hab. Australia.

36. Polistes humilis. B.M.

Vespa humilis, *Fabr. Spec. Ins.* i. 461. 20; *Mant. Ins.* i. 288. 23; *Ent. Syst.* ii. 261. 28.
Oliv. Encycl. Méth. vi. 682. 62.
Polistes humilis, *Fabr. Syst. Piez.* 270. 5.
Sauss. Mon. Guêpes Soc. 52. 8.

Hab. Tasmania; New Holland (Port Stephen).

Div. VI.—*Species of Brazil, Cayenne, South America, Cuba.*

37. Polistes aterrimus.

Polistes aterrimus, *Sauss. Mon. Guêpes Soc.* 73. 33.

Hab. Brazil (Amazons). (Coll. J. S. Baly, Esq.)

38. POLISTES MELANOSOMA. B.M.
Polistes melanosoma, *Sauss. Mon. Guêpes Soc.* 76. 36.
Hab. Brazil (Goyaz).

39. POLISTES SPINOLÆ.
Polistes Spinolæ, *Sauss. Mon. Guêpes Soc.* 80. 43.
Hab. Brazil.

40. POLISTES PACIFICUS.
Polistes pacificus, *Fabr. Syst. Piez.* 274. 28.
Sauss. Mon. Guêpes Soc. 84. 46.
Hab. Para.

41. POLISTES BINOTATUS.
Polistes binotatus, *Sauss. Mon. Guêpes Soc.* 87. 50. t. 7. f. 6.
Hab. Brazil.

42. POLISTES OPALINUS.
Polistes opalinus, *Sauss. Mon. Guêpes Soc.* 89. 52. t. 12. f. 6.
Hab. Brazil.

43. POLISTES CINERASCENS.
Polistes cinerascens, *Sauss. Mon. Guêpes Soc.* 99. 61. t. 10. f. 4.
Hab. Brazil.

44. POLISTES SUBSERICEUS. B.M.
Polistes subsericeus, *Sauss. Mon. Guêpes Soc.* 100. 62. t. 12. f. 7.
Hab. Brazil.

45. POLISTES LILIACEUSCULUS.
Polistes liliaceusculus, *Sauss. Mon. Guêpes Soc.* 98. 59.
Hab. Para.

46. POLISTES LILIACIOSUS. B.M.
Polistes liliaciosus, *Sauss. Mon. Guêpes Soc.* 97. 58. t. 11. f. 7.
Hab. Brazil.

47. Polistes Cavapyta.

Polistes Cavapyta, *Sauss. Mon. Guêpes Soc.* 87. 51. t. 11. f. 8.

Hab. La Plata.

48. Polistes bicolor. B.M.

Polistes bicolor, *St. Farg. Hym.* i. 521. 4.
Sauss. Mon. Guêpes Soc. 76. 37.

Hab. Cayenne; Surinam.

49. Polistes analis. B.M.

Vespa analis, *Fabr. Ent. Syst. Supp.* 261. 40.
Polistes analis, *Fabr. Syst. Piez.* 272. 15.
Sauss. Mon. Guêpes Soc. 80. 42.

Hab. Cayenne.

50. Polistes versicolor. B.M.

Vespa versicolor, *Oliv. Encycl. Méth.* vi. 692. 114.
Vespa myops, *Fabr. Ent. Syst. Supp.* 261. 40.
Polistes myops, *Fabr. Syst. Piez.* 272. 16.
Sauss. Mon. Guêpes Soc. 81. 44. t. 7. f. 5, t. 8. f. 6. (var.)

Var. Specimens from St. Domingo in the British Museum are much more highly coloured than any described; the metathorax is almost entirely yellow, and the abdominal segments have broad continuous yellow bands.

Hab. Cayenne; Brazil (Amazons); St. Domingo.

51. Polistes crinita. B.M.

Vespa crinita, *Felton, Phil. Trans.* liv. 53. t. 6 (1773).
Vespa Americana, *Fabr. Syst. Ent.* 370. 38; *Spec. Ins.* i. 467. 52; *Mant. Ins.* i. 292. 64; *Ent. Syst.* ii. 276. 81.
Christ. Hym. 243.
Oliv. Encycl. Méth. vi. 691. 111.
Vespa tricolor, *Fabr. Syst. Ent.* 369. 32; *Spec. Ins.* i. 465. 43; *Mant. Ins.* i. 291. 52; *Ent. Syst.* ii. 271. 67; *Syst. Piez.* 266. 70.
Christ. Hym. 225.
Oliv. Encycl. Méth. vi. 689. 58.
Polistes Billardieri, *Fabr. Syst. Piez.* 274. 26.
Vespa multicolor, *Oliv. Encycl. Méth.* vi. 691. 113.
Polistes Americana, *Fabr. Syst. Piez.* 275. 29.
Sauss. Mon. Guêpes Soc. 93. 55. t. 11. f. 4, 5.

Hab. Cayenne.

52. Polistes Actæon.

Polistes Actæon, *Halid. Trans. Linn. Soc. Lond.* xvii. 323. 32.
Sauss. Mon. Guêpes Soc. 98. 60. t. 11. f. 2.

Hab. Cayenne; Columbia.

53. Polistes Ferreri.

Polistes Ferreri, *Sauss. Mon. Guêpes Soc.* 77. 39.

Hab. South America.

54. Polistes ruficornis.

Polistes ruficornis, *Sauss. Mon. Guêpes Soc.* 85. 48. t. 11. f. 3.

Hab. South America.

55. Polistes biguttatus.

Polistes biguttatus, *Halid. Trans. Linn. Soc. Lond.* xvii. 323. 30.
Sauss. Mon. Guêpes Soc. 86. 49.

Hab. South America.

56. Polistes carnifex. B.M.

Vespa carnifex, *Fabr. Syst. Ent.* 365. 4; *Spec. Ins.* i. 461. 16; *Mant. Ins.* i. 288. 19; *Ent. Syst.* ii. 260. 23.
Christ. Hym. 239.
Oliv. Encycl. Méth. vi. 681. 58.
Polistes carnifex, *Fabr. Syst. Piez.* 272. 13.
Sauss. Mon. Guêpes Soc. 90. 53. t. 10. f. 5.
Polistes rufipennis, *Latr. Voy. Humb. et Bonpl. Ins.* ii. t. 79. no. 133. t. 38. f. 4.
Polistes major, *Palis. de Beauv. Ins. d'Afr. et Amér.* 206. t. 8. f. 1.
Polistes chlorostoma, *St. Farg. Hym.* i. 521. 5.
Polistes onerata, *St. Farg. Hym.* i. 524. 11.
Polistes valida, *Say, North Amer. Hym.* 389. 3.
Polistes transversosignatus, *Spin. Voy. Entom. de Ghill.* 62.

Hab. St. Domingo; Mexico; South America.

57. Polistes lineatus.

Vespa lineata, *Fabr. Spec. Ins.* i. 461. 15; *Mant. Ins.* i. 288. 17; *Ent. Syst.* ii. 259. 20.
Oliv. Encycl. Méth. vi. 581. 56.
Polistes lineata, *Fabr. Syst. Piez.* 271. 9.
Polistes lineatus, *Sauss. Mon. Guêpes Soc.* 95. 56. t. 11. f. 6.
Polistes Cubensis, *St. Farg. Hym.* i. 526. 13.

Hab. South America.

58. Polistes rufidens.

Polistes rufidens, *Sauss. Mon. Guêpes Soc.* 77. 38.

Hab. Venezuela.

Div. VII.—*Species of Mexico and North America.*

59. Polistes instabilis. B.M.

Polistes instabilis, *Sauss. Mon. Guêpes Soc.* 91. 54. t. 10. f. 1, var. t. 11. f. 1.

Hab. Mexico; East Florida; Mount Pleasant, Ohio. (Coll. E. Doubleday, Esq.) New York. (Coll. R. Foster, Esq.)

60. Polistes exilis.

Polistes exilis, *Sauss. Mon. Guêpes Soc.* 85. 47. t. 12. f. 5.

Hab. North America.

61. Polistes pallipes. B.M.

Polistes pallipes, *St. Farg. Hym.* i. 530. 18.
Sauss. Mon. Guêpes Soc. 82. 45. t. 12. f. 1, 2, 3, 4.

Hab. North and South America (East Florida; Ohio; Wilmington; Delaware). (Coll. E. Doubleday, Esq.)

62. Polistes annularis. B.M.

Vespa annularis, *Linn. Syst. Nat.* i. 950. 9; *Amœnit. Acad.* vi. 413. 93.
Muell. Ed. Linn. Ins. ii. 882. 9.
Fabr. Syst. Ent. 366. 16; *Spec. Ins.* i. 461. 19; *Mant. Ins.* i. 288. 22; *Ent. Syst.* ii. 950. 9.
De Geer, Mém. Ins. iii. 583. 7. t. 29. f. 11.
Oliv. Encycl. Méth. vi. 682. 61.
Illig. Cent. Ins. 30. no. 93.
Polistes annularis, *St. Farg. Hym.* i. 522. 7.
Sauss. Mon. Guêpes Soc. 79. 41. t. 8. f. 4.
Polistes cincta, *St. Farg. Hym.* i. 522. 6.

Hab. North and South America.

63. Polistes aurifer. B.M.

Polistes aurifer, *Sauss. Mon. Guêpes Soc.* 78. 40.

Hab. California.

64. Polistes metricus. B.M.

Polistes metrica, *Say, Bost. Journ. Nat. Hist.* i. 388. 1.
Sauss. Mon. Guêpes Soc. 75. 35. t. 7. f. 4.

Hab. North America.

65. Polistes rubiginosus. B.M.

Polistes rubiginosus, *St. Farg. Hym.* i. 524. 10.
Sauss. Mon. Guêpes Soc. 74. 34.

Hab. Philadelphia.

66. Polistes Canadensis. B.M.

Vespa Canadensis, *Linn. Syst. Nat.* i. 952. 25.
De Geer, Ins. iii. 580. 3. t. 29. f. 7.
Sulz. Hist. Ins. t. 19. f. *a*.
Réaum. Mém. Ins. vi. 169. t. 17. f. 4.
Christ. Hym. 225.
Oliv. Encycl. Méth. vi. 684. 74.
Vespa marribosus, *Linn. Syst. Nat.* i. 952. 26.
Christ. Hym. 217.
Vespa nigripennis, *De Geer, Ins.* iii. 582. t. 29. f. 10.
Oliv. Encycl. Méth. vi. 684.
Vespa lanio, *Fabr. Syst. Ent.* 365. 15; *Spec. Ins.* i. 461. 17; *Mant. Ins.* i. 288. 20; *Ent. Syst.* ii. 260. 24.
Oliv. Encycl. Méth. vi. 681. 59.
Polistes lanio, *Fabr. Syst. Piez.* 269. 1; *Smith, Trans. Ent. Soc. Lond.* new ser. i. 176. t. 16. f. 1.
Polistes infuscata, *St. Farg. Hym.* i. 520. 2.
Polistes unicolor, *St. Farg. Hym.* i. 520. 3.
Polistes erythrocephala, *Latr. Voy. Humb. et Bonpl. Ins.* ii. 96. no. 132. t. 38. f. 3.
Polistes Canadensis, *Sauss. Mon. Guêpes Soc.* 72. 32. t. 1. f. 1.

Hab. North and South America.

67. Polistes oculatus. B.M.

Male. Length 7 lines.—Black: the head and thorax densely covered with short fulvous pubescence; the face as high as the emargination of the eyes, the mandibles, outer orbits of the eyes, and the scape in front, yellow; the flagellum ferruginous above, with the two basal joints as well as the scape above, fuscous; the eyes very large, prominent, and approximating more than is usual in this genus. Thorax: a narrow line on the prothorax in front, a similar one on the posterior margin, a spot beneath the wings, the pectus, coxæ and femora in front, the tegulæ, two

obscure spots on the scutellum, and two narrow longitudinal lines on the metathorax, yellow; the metathorax is delicately striated transversely and has a deeply impressed fovea in the middle; the legs ferruginous, with the intermediate and posterior coxæ and femora, and also the posterior tibiæ behind, black. Abdomen ferruginous, with the base of the first and second segments black; their apical margins with a narrow yellow fascia; beneath, the margins of all the segments with a yellow fascia.

Hab. Mexico.

68. Polistes minor.

Polistes minor, *Palis. de Beauv. Ins. d'Afr. et d'Amér.* 207. t. 8. f. 3.
Sauss. Mon. Guêpes Soc. 96. 57. t. 11. f. 3.
Polistes Poeyi, *St. Farg. Hym.* i. 532. 20.

Hab. Cuba.

Genus 7. APOICA.

Vespa, pt., *Oliv. Encycl. Méth. Ins.* vi. 675 (1791).
Polistes, pt., *Fabr. Syst. Piez.* 276 (1804).
Apoica, *St. Farg. Hym.* i. 536 (1836).

1. Apoica pallida. B.M.

Vespa pallida, *Oliv. Encycl. Méth. Ins.* vi. 675. 26.
Polistes pallens, *Fabr. Syst. Piez.* 276. 35.
Apoica pallida, *St. Farg. Hym.* i. 538. 2.
Sauss. Mon. Guêpes Soc. 107. 1. t. 18. f. 1.

Hab. Brazil (Para); South America; Cayenne; Buenos Ayres.

2. Apoica virginea. B.M.

Polistes virginea, *Fabr. Syst. Piez.* 277. 37.
Apoica bilineolata, *St. Farg. Hym.* i. 537. 1.
Apoica virginea, *Sauss. Mon. Guêpes Soc.* 107. 2. t. 18. f. 2.

Hab. South America.

3. Apoica arborea.

Apoica arborea, *Sauss. Mon. Guêpes Soc.* 108. 3. t. 26. f. 1.

Hab. South America. (Coll. J. S. Baly, Esq.)

4. Apoica cubitalis.

Apoica cubitalis, *Sauss. Mon. Guêpes Soc.* 109. 4. t. 18. f. 3.

Hab. Bahia.

Genus 8. VESPA.

Vespa, pt., *Linn. Syst. Nat.* i. 948 (1766).
Crabro, pt., *Christ. Hym.* 217 (1791).
Sphex, pt., *Sulz. Hist. Ins.* (1761).

Div. I.—*Species of Europe.*

1. Vespa vulgaris. B.M.

Vespa vulgaris, *Linn. Faun. Suec.* 415. no. 1671; *Syst. Nat.* i. 949. 4; ♀, *Mus. Linn. Soc.*
Scop. Ent. Carn. 825.
De Geer, Ins. ii. pt. 2. 766. t. 26. f. 1–15.
Fabr. Syst. Ent. 364. 9; *Spec. Ins.* i. 460. 9; *Mant. Ins.* i. 287. 10; *Ent. Syst.* ii. 256. 10; *Syst. Piez.* 255. 9.
Muell. Faun. Fried. no. 635.
Harris, Expos. Engl. Ins. 128. t. 37. f. 5.
Frisch, Ins. ix. t. 12. f. 2.
Schrank, Enum. Ins. Austr. no. 787.
Schæff. Elem. Ins. t. 130; *Icon. Ins.* t. 35. f. 4.
Fourc. Ent. Par. ii. 430. 2.
Villers, Entom. iii. 263. 2.
Rossi, Faun. Etrus. ii. 83. 861.
Christ. Hym. 236. t. 22. f. 2.
Panz. Faun. Germ. 49. 19.
Don. Brit. Ins. vii. t. 266.
Latr. Ann. Mus. Hist. Nat. i. 288; *Hist. Nat. des Crust. et Ins.* xiii. 351. 3.
Zett. Ins. Lapp. 453. 2.
Walck. Faun. Par. ii. 91. 4.
Bing. Anim. Biog. iii. 341.
Stew. Elem. Nat. Hist. ii. 238.
Lamarck, Hist. Nat. Anim. sans Vert. iv. 88. 2.
Samouelle, Compend. 280. 2.
Kirby & Spence, Introd. Ent. ii. 106.
Kirby, Faun. Bor. Amer. 263?
Brullé, Hist. Nat. Il. Canar. ii. pt. 2. 89.
St. Farg. Hym. i. 516. 14. t. 10.
Herr.-Schæff. Faun. Germ. 179. 3 *a*. p. 36.
Smith, Zool. i. 162. f. 2 *a–f.*
Blanch. Hist. des Ins. i. 62. t. 3. f. 3.
Sauss. Mon. Guêpes Soc. 113. t. 14. f. 3, 3 *a–e.*
Vespa Saxonica, *Fabr. Ent. Syst.* ii. 256. 12 ♂?
Aristot. Hist. An. i. ix. 41.
Plin. Hist. Nat. i. xi. c. 21.
Aldrov. Ins. 198.

Vespa Saxonica, *Schwenkf.* (Vespa major) *Theriotr. Siles.* 561.
Swammerd. Bibl. Nat. t. 26. f. 8.
Mouff. Theat. Ins. 52. f. 1, 2.
Ray (Vespa sylvestris), *Ins.* 252.
Cloquet (Guêpe commune), *Faune des Médec.* v. 302. 304. 305.

Hab. Europe.

Probably many of the above quotations refer to the *V. Germanica*, which has been usually regarded as a variety of *V. vulgaris*, but it is impossible to determine this point satisfactorily.

2. VESPA GERMANICA. B.M.

Vespa vulgaris, *Muell. Edit. Linn. Ins.* ii. 880. 4. t. 27. f. 3.
Blanch. Règne Anim. t. 124. f. 5.
Smith, Zool. i. 162. 2 *f, a—f.* (var.)
Vespa maculata, *Scop. Ent. Carn.* no. 831 ?
Christ. Hym. 240.
Vespa Germanica, *Fabr. Ent. Syst.* ii. 256. 12 ♂; *Syst. Piez.* 256. 10.
St. Farg. Hym. i. 515. 13.
Panz. Faun. Germ. 49. 20 ☿.
Herr.-Schæff. Faun. Germ. 179. 2. p. 35.
Smith, Zool. ix.; *Append.* clxxvii.
Sauss. Mon. Guêpes Soc. 116. 3. t. 14. f. 4, 4 *a–c.*

Hab. Europe.

3. VESPA RUFA. B.M.

Vespa rufa, *Linn. Faun. Suec.* no. 1672; *Syst. Nat.* 949. 5.
Fabr. Syst. Ent. 364. 10; *Spec. Ins.* i. 460. 11; *Mant. Ins.* i. 388. 12; *Ent. Syst.* ii. 258. 15; *Syst. Piez.* 256. 13.
Muell. Faun. Friedr. no. 636.
Sulzer, Gesch. Ins. t. 27. f. 13.
Schrank, Ins. Austr. 788.
Villers, Ent. iii. 264. 3.
Oliv. Encycl. Méth. vi. 680. 51.
Christ. Hym. 236. t. 22. f. 3.
Latr. Hist. Nat. des Crust. et Ins. xiii. 352. 5.
Zett. Ins. Lapp. 454. 4.
St. Farg. Hym. i. 517. 15.
Curtis, Brit. Ent. xvi. t. 760.
Herr.-Schæff. Faun. Germ. 179. 5. p. 37.
Blanch. Hist. des Ins. 62. t. 3. f. 1.
Smith, Zool. i. 167. 3 *f, g, h, i.*
Ménétr. Mém. Acad. Imp. des Sc. de St. Péters. vi. 304 (1848).
Sauss. Mon. Guêpes Soc. 120. 4. t. 14. f. 5, 5 *a.*
Ray (Vespa sylvestris, vulgari similis, &c.), *Ins.* 252.

Hab. Europe.

4. VESPA ARBOREA. B.M.

Vespa borealis, *Smith, Zool.* i. 176. 6 (nec *Kirby*, nec *Zett.*).
Vespa arborea, *Smith, Zool.* vii.; *Supp.* lx.
Sauss. Mon. Guêpes Soc. 122. 5. t. 14. f. 8, 8 *a*.

Hab. Britain; Switzerland.

5. VESPA SYLVESTRIS. B.M.

Vespa sylvestris, *Scop. Ent. Carn.* 826.
Villers, Entom. iii. 274. 18.
Christ. Hym. 235. t. 22. f. 1 *a, b*.
Oliv. Encycl. Méth. vi.
Smith, Cat. Brit. Ent. 49. 5.
Sauss. Mon. Guêpes Soc. 123. 6. t. 14. f. 6.
Vespa holsatica, *Fabr. Ent. Syst.* ii. 257. 14; *Syst. Piez.* 256. 12.
Latr. Ann. Mus. Hist. Nat. i. 288. t. 21. f. 1–3; *Hist. Nat. Crust. et Ins.* xiii. 352.
Smith, Zool. i. 168. 4. f. *k, l, m*.
Vespa crassa, *Herr.-Schæff. Faun. Germ.* 179. 4. p. 34.
Vespa arbustorum, *Blanch. Hist. des Ins.* i. 62. t. 3. f. 2.

Hab. Europe.

6. VESPA SAXONICA. B.M.

Vespa Saxonica, *Fabr. Ent. Syst.* ii. 256. 12; *Syst. Piez.* 256. 11.
Panz. Faun. Germ. 49. 21.
Herr.-Schæff. Faun. Germ. 179. 37.
Sauss. Mon. Guêpes Soc. 126. 7.
Vespa sexcincta, *Panz. Faun. Germ.* 63. 1.
Herr.-Schæff. Faun. Germ. 149. 36.
Vespa vulgaris, *Linn.* (var. ♂?)

Hab. Europe.

7. VESPA NORWEGICA. B.M.

Vespa Norwegica, *Fabr. Spec. Ins.* i. 460. 11; *Mant. Ins.* i. 288. 13; *Ent. Syst.* ii. 258. 16; *Syst. Piez.* 256. 14.
Gmelin, Edit. Linn. i. 2751. 41.
Villers, Entom. iii. 275. 20.
Oliv. Encycl. Méth. vi. 680. 52.
Panz. Faun. Germ. 81. 16.
Zett. Ins. Lapp. 454. 5.
Herr.-Schæff. Faun. Germ. 37.
Smith, Zool. x. 370. 1.
Sauss. Mon. Guêpes Soc. 128. 8. t. 14. f. 7.

Vespa Britannica, *Leach, Zool. Miscel.* i. 112. t. 50. f. 1 ♂, 2 ♀, 3 ☿.
Sam. Compend. i. 43.
Steph. Syst. Cat. 370. 50. 33.
Smith, Zool. i. 169. 5.
Vespa borealis, *Zett. Ins. Lapp.* 454.

Hab. Europe.

Note.—M. Saussure considers the *Vespa Britannica* of Leach synonymous with *V. sylvestris*; that this is an error, is proved by an examination of the identical specimens, which are figured in the 'Zoological Miscellany;' the specimen of the female is one having only a slight tinge of red on each side of the second segment of the abdomen, which is the characteristic of a large majority of the British examples of this sex of the species, but it is not indicated in the figure; in the figure of the male the rufous spot is omitted; but in that of the worker, the black band on the second segment is obliterated on each side, leaving only the transverse black stripe so characteristic of the species: the specimens figured by Dr. Leach are in the collection of the British Museum, and each one has the name *Britannica*, in Leach's handwriting, attached to the specimen; this places the matter beyond a doubt. It may also be well to mention the fact, that in a whole brood of *Vespa Norwegica* obtained from the North of England, not more than a dozen of the females had the red spot at the sides of the second abdominal segment; in *Vespa Norwegica* the second black band is not produced into an angular point on its lower margin in the middle, but in *Vespa sylvestris* it is always so.

8. Vespa media.

Vespa media, *De Geer, Mém. Ins.* ii. 790. t. 27. f. 2–7.
Oliv. Encycl. Méth. vi. 679. 49.
Latr. Hist. Nat. des Crust. et Ins. xiii. 351.
Sauss. Mon. Guêpes Soc. 129. 9. t. 14. f. 9.
Vespa Crabro medius, *Villers, Linn. Ent.* iii. 273. 17.
Vespa Austriaca, *Panz. Faun. Germ.* 63. t. 2 *a* (var.).
Vespa Geerii, *St. Farg. Hym.* i. 510.

Hab. North of Europe.

9. Vespa Crabro. B.M.

Vespa Crabro, *Linn. Faun. Suec.* no. 1670; *Syst. Nat.* i. 948. 3.
De Geer, Ins. ii. 801. t. 27.
Mueller, Edit. Linn. Ins. ii. 880. 3.
Gmelin, Edit. Linn. i. 2750. 3.

Vespa Crabro, *Fabr. Syst. Ent.* 364. 8; *Spec. Ins.* i. 459. 8; *Mant. Ins.* i. 287. 9; *Ent. Syst.* ii. 255. 9; *Syst. Piez.* 255. 8.
Muell. Faun. Friedr. 634.
Scop. Ent. Carn. no. 824.
Harris, Expos. Engl. Ins. 127. t. 24. f. 1, 2, 3.
Schrank, Ins. Austr. 786.
Fourc. Ent. Par. ii. 430. 1.
Schæff. Icon. Ins. Ratisb. t. 53. f. 5, t. 136. f. 3.
Poda, Mus. Græc. 108.
Villers, Ent. iii. 262. 1.
Rossi, Faun. Etrus. ii. 83. 860.
Christ. Hym. 215. t. 18. f. 3.
Don. Brit. Ins. xiv. 85. t. 502.
Walcken. Faun. Par. ii. 90.
Latr. Hist. Nat. des Crust. et Ins. xiii. 350.
Imhoff, Ins. der Schweiz, i. iii. f. 1.
Zett. Ins. Lapp. 435. 1.
St. Farg. Hym. i. 509. 7. t. 9. f. 1–3.
Smith, Cat. Brit. Hym. 48. 1.
Sauss. Mon. Guêpes Soc. 130. 10.
Aldrov. Ins. 225.
Swammerd. Bibl. Nat. t. 26. f. 9.
Ray (Crabro vulgaris and congener), *Ins.* 249 & 250.
Geoff. Ins. ii. 360. 1.
Réaum. Mém. Ins. vi. 215. t. 48. f. 1. 4–10. & iv. t. 10. f. 9.
Le Guêpe frelon, *Cloquet, Faune des Médecins,* v. 304. 1. t. 3. f. 5.
Hab. Europe.

10. Vespa orientalis. B.M.

Vespa orientalis, *Linn. Syst. Nat. Mant.* 540.
Fabr. Syst. Ent. 363. 3; *Spec. Ins.* i. 458. 3; *Mant. Ins.* i. 287. 4; *Ent. Syst.* ii. 254. 4; *Syst. Piez.* 254. 4.
Gmelin, Ed. Linn. i. 2748. 31.
Oliv. Encycl. Méth. vi. 677. 41.
Christ. Hym. 237.
St. Farg. Hym. i. 507. 5.
Ménétr. Mém. de l'Acad. Imp. des Sc. de St. Péters. vi. 304. 976 (1849).
Sauss. Mon. Guêpes Soc. 132. 11.
Vespa turcica, *Drury, Illustr. Exot. Ins.* ii. t. 39. f. 1.
Vespa fusca, *Christ. Hym.* 216.
Vespa ægyptiaca, *Vallot, Tabl. de Réaum.* 170.
Vespa nilotica, *Vallot, Tabl. de Réaum.* 170.
Savigny, Descr. de l'Egypt. Hym. pl. 8. f. 1.
Hab. South of Europe; Greece (Albania); Turkey; Egypt; India (Punjaub).

11. Vespa Jurinei. B.M.

Vespa Jurinei, *Sauss. Mon. Guêpes Soc.* 133. 12.

Hab. Albania.

Div. II.—*Species of Asia, India, China, Java, Philippine Islands.*

12. Vespa cincta. B.M.

Vespa cincta, *Fabr. Syst. Ent.* 362. 1; *Spec. Ins.* i. 458. 1; *Mant. Ins.* i. 287. 6; *Ent. Syst.* ii. 254. 6; *Syst. Piez.* 254. 6.
Gmelin, Edit. Linn. i. 2748. 23.
Oliv. Encycl. Méth. Ins. vi. 676. 37.
Christ. Hym. 219.
St. Farg. Hym. 505. 1.
Sauss. Mon. Guêpes Soc. 152. 37.
Sphex tropica, *Sulz. Hist. Ins.* t. 27. f. 5.
Vespa unifasciata, *Oliv. Encycl. Méth.* vi. 677. 39.
Vespa tenebrionis, *Christ. Hym.* 216.

Hab. India; China; Java; Sumatra.

13. Vespa affinis. B.M.

Vespa affinis, *Fabr. Mant. Ins.* i. 287. 2; *Ent. Syst.* ii. 253. 2; *Syst. Piez.* 254. 2.
Gmelin, Edit. Linn. i. 2748. 29.
Oliv. Encycl. Méth. vi. 677. 38.
St. Farg. Hym. i. 506. 2.
Sauss. Mon. Guêpes Soc. 154. 39.

Hab. India; China.

14. Vespa analis. B.M.

Vespa analis, *Fabr. Syst. Ent.* 365. 5; *Spec. Ins.* i. 459. 5; *Mant. Ins.* i. 287. 6; *Ent. Syst.* ii. 254. 6; *Syst. Piez.* 254. 6.
Gmelin, Edit. Linn. i. 2749. 33.
Christ. Hym. 218.
Oliv. Encycl. Méth. vi. 677. 43.
St. Farg. Hym. i. 508. 6.
Sauss. Mon. Guêpes Soc. 152. 36.
Crabro sphinx, *Christ. Hym.* 217. t. 18. f. 5.

Hab. India.

15. Vespa bicolor. B.M.

Vespa bicolor, *Fabr. Mant. Ins.* i. 288. 14; *Ent. Syst.* ii. 258. 17; *Syst. Piez.* 257. 15.

Vespa bicolor, *Gmelin, Edit. Linn.* i. 2750. 40.
Oliv. Encycl. Méth. vi. 680. 53.
St. Farg. Hym. i. 512. 10.
Sauss. Mon. Guêpes Soc. 143. 25.

Hab. India; China.

16. VESPA VELUTINA. B.M.

Vespa velutina, *St. Farg. Hym.* i. 507. 4.
Sauss. Mon. Guêpes Soc. 144. 26.

Hab. India; Java; China.

17. VESPA AURARIA. B.M.

Vespa auraria, *Smith, Trans. Ent. Soc. Lond.* new ser. ii. 46. t. 8. f. 8.
Sauss. Mon. Guêpes Soc. 147. 29.

Hab. Northern India.

18. VESPA OBLITERATA. B.M.

Vespa obliterata, *Smith, Trans. Ent. Soc. Lond.* new ser. ii. 47.
Sauss. Mon. Guêpes Soc. 149. 32.

Hab. Northern India.

This species will in all probability prove to be the worker of *Vespa basalis*.

19. VESPA BASALIS. B.M.

Vespa basalis, *Smith, Trans. Ent. Soc. Lond.* new ser. ii. 46.
Sauss. Mon. Guêpes Soc. 148. 31.

Hab. India (Nepaul).

20. VESPA MAGNIFICA. B.M.

Vespa magnifica, *Smith, Trans. Ent. Soc. Lond.* new ser. i. 45.
Sauss. Mon. Guêpes Soc. 155. 40. t. 13. f. 3 ♀.

Hab. India (Nepaul, Landoor).

21. VESPA TYRANNICA. B.M.

Worker or female. Length 9¼ lines.—Black: the head and thorax with a thin black pubescence; covered with fine changeable velvety pile; the clypeus emarginate in front, the angles of the emargination rounded; the mandibles, cheeks, clypeus, a trifid spot above and the inner orbit of the eyes, orange; tips of the mandibles and inner margin, black; the antennæ fulvous

beneath. The outer margin of the wing-scales testaceous; the wings yellowish, hyaline, and with a dark stain on the anterior margin of the superior pair towards their base; the nervures pale ferruginous, the costal nervure black; all the segments of the abdomen, except the basal one, broadly margined with yellow.

Hab. Singapore. (Coll. A. Wallace, Esq.)

This species somewhat resembles the *Vespa velutina*, from which it is distinguished by having a larger head, which is wider than the thorax; the basal segment of the abdomen is proportionably much longer, with its basal margin regularly rounded; and the antennæ are also shorter.

22. VESPA DORYLLOIDES. B.M.

Vespa anomala, *Sauss. Mon. Guêpes Soc.* 112. 1. t. 14. f. 2.
Vespa dorylloides, *Sauss. Mon. Guêpes Soc. Supp.* 256.

Hab. Java; Tenasserim; East India; Sumatra.

23. VESPA ALDUINI.

Vespa Alduini, *Guérin, Voy. de la Coquille, Ins.* t. 9. f. 6.
Sauss. Mon. Guêpes Soc. 154. 38.
Vespa bimaculata, *Guérin, Voy. de la Coquille*, 264.

Hab. Java.

Probably a small variety of *V. cincta* (Saussure).

24. VESPA BELLICOSA. B.M.

Vespa bellicosa, *Sauss. Mon. Guêpes Soc.* 146. 28. t. 14. f. 10.

Hab. Java.

25. VESPA CRABRONIFORMIS. B.M.

Vespa crabroniformis, *Smith, Trans. Ent. Soc. Lond.* new ser. ii. p. 40.
Sauss. Mon. Guêpes Soc. 145. 27.

Hab. North China.

26. VESPA MANDARINIA. B.M.

Vespa mandarinia, *Smith, Trans. Ent. Soc. Lond.* new ser. t. 8. f. 1.
Sauss. Mon. Guêpes Soc. 150. 34.

Hab. China (Shanghai). (Coll. R. Fortune, Esq.)

27. VESPA DUCALIS. B.M.

Vespa ducalis, *Smith, Trans. Ent. Soc. Lond.* new ser. ii. 39.
Sauss. Mon. Guêpes Soc. 151. 35.

Hab. North China (Teing-Teing, near Ning-Po-Foo); Northern India.

28. VESPA NIGRIPENNIS. B.M.

Vespa nigripennis, *Sauss. Mon. Guêpes Soc.* 156. 41.

Hab. Philippine Islands.

29. VESPA DEUSTA.

Vespa deusta, *St. Farg. Hym.* i. 506. 3.
Sauss. Mon. Guêpes Soc. 149. 33.

Hab. Philippine Islands.

30. VESPA LUCTUOSA. B.M.

Vespa luctuosa, *Sauss. Mon. Guêpes Soc.* 143. 24.

Hab. Philippine Islands.

31. VESPA PHILIPPINENSIS. B.M.

Vespa Philippinensis, *Sauss. Mon. Guêpes Soc.* 148. 30.

Hab. Philippine Islands.

DIV. III.—*Species of North America; Mexico.*

32. VESPA MACULATA. B.M.

Vespa maculata, *Linn. Syst. Nat.* i. 948. 2; *Amœn. Acad.* vi. 412. 91.
Muell. Ed. Linn. Ins. ii. 880. 2.
Gmelin, Ed. Linn. i. 2749. 2.
Fabr. Syst. Ent. 364. 11; *Spec. Ins.* i. 460. 13; *Mant. Ins.* i. 288. 15; *Ent. Syst.* ii. 258. 18; *Syst. Piez.* 257. 17.
De Geer, Ins. iii. 584. 9. t. 29. f. 13.
Christ. Hym. 217.
Oliv. Encycl. Méth. vi. 681. 54.
Illig. Cent. Ins. Car. 29. 91.
Kirby, Faun. Boreal. Amer. 266.
St. Farg. Hym. i. 512. 9.
Sauss. Mon. Guêpes Soc. i. 141. 22.
Vespa maculata Americana, *Christ. Hym.* 239.

Hab. North America.

33. VESPA CAROLINA. B.M.

Vespa Carolina, *Drury, Exot. Ins.* t. 44. f. 4.
Gmelin, Ed. Linn. i. 2749. 1.
Fabr. Syst. Ent. 363. 6; *Spec. Ins.* i. 459. 6; *Mant. Ins.* i. 278. 7; *Ent. Syst.* ii. 255. 9; *Syst. Piez.* 225. 7.
Muell. Ed. Linn. ii. 879. 1.
Christ. Hym. 217.
Oliv. Encycl. Méth. vi. 678. 44.
St. Farg. Hym. i. 513.
Sauss. Mon. Guêpes Soc. 142. 23.
Hab. North America.

34. VESPA ARENARIA.

Vespa arenaria, *Fabr. Syst. Ent.* 365. 12; *Spec. Ins.* i. 461. 14; *Mant. Ins.* i. 288. 16; *Ent. Syst.* ii. 258. 19; *Syst. Piez.* 258. 20.
Oliv. Encycl. Méth. vi. 681. 55.
Gmelin, Ed. Linn. p. 2749. 34.
Vespa marginata, *Kirby, Faun. Boreal. Amer.* 256. t. 6. f. 2.
Hab. North America.

35. VESPA DIABOLICA.

Vespa diabolica, *Sauss. Mon. Guêpes Soc.* 138. 18.
Hab. North America.

36. VESPA INFERNALIS.

Vespa infernalis, *Sauss. Mon. Guêpes Soc.* 139. 19.
Hab. North America.

37. VESPA BOREALIS.

Vespa borealis, *Kirby, Faun. Boreal. Amer.* 264.
Hab. North America.

38. VESPA CONSOBRINA.

Vespa consobrina, *Sauss. Mon. Guêpes Soc.* 141. 21.
Hab. Newfoundland.

39. VESPA SULPHUREA. B.M.

Vespa sulphurea, *Sauss. Mon. Guêpes Soc.* 137. 17.
Hab. California.

40. VESPA VIDUA.

Vespa vidua, *Sauss. Mon. Guêpes Soc.* 136. 16.
Hab. Carolina.

41. Vespa cuneata. B.M.

Vespa cuneata, *Fabr. Syst. Piez.* 258. 21.
St. Farg. Hym. i. 513. 12.

Hab. Mexico.

Genus 9. SYNŒCA.

Vespa, pt., *Linn. Syst. Nat.* i. 952 (1766).
Polistes, pt., *Fabr. Syst. Piez.* 279 (1804).
Epipona, pt., *Halid. Trans. Linn. Soc. Lond.* xvii. (1837).
Synœca, *Sauss. Ann. Soc. Ent. Fr.* 2nd ser. x. 552 (1852).

1. Synœca Surinama. B.M.

Vespa Surinama, *Linn. Syst. Nat.* i. 952. 23.
Oliv. Encycl. Méth. vi. 676.
Christ. Hym. 215.
Vespa nigricornis, *Oliv. Encycl. Méth.* vi. 615.
Polistes cærulea, *Fabr. Syst. Piez.* 279. 46.
Synœca cærulea, *Sauss. Ann. Soc. Ent. Fr.* 2nd ser. x. 552.

Hab. Cayenne.

2. Synœca cyanea. B.M.

Vespa cyanea, *Fabr. Syst. Ent.* 372. 45; *Spec. Ins.* i. 469. 64; *Mant. Ins.* i. 293. 78; *Ent. Syst.* ii. 282. 99.
Oliv. Encycl. Méth. vi. 674.
Polistes cyanea, *Fabr. Syst. Piez.* 279. 47.
Epipona cyanea, *Halid. Trans. Linn. Soc. Lond.* xvii. 322. 27.
Synœca cyanea, *Sauss. Mon. Guêpes Soc.* 159. 2.

Hab. Cayenne.

3. Synœca azurea. B.M.

Synœca azurea, *Sauss. Ann. Soc. Ent. Fr.* 2nd ser. x. 554. 3; *Mon. Guêpes Soc.* 160. 3.

Hab. Brazil; Bahia; Mexico.

4. Synœca ultramarina. B.M.

Synœca ultramarina, *Sauss. Mon. Guêpes Soc.* 160. 4.

Hab. Brazil (St. Catharine).

5. Synœca violacea.

Synœca violacea, *Sauss. Mon. Guêpes Soc.* 161. 5.

Hab. Brazil (St. Catharine).

6. Synœca chalybea.

Synœca chalybea, *Sauss. Mon. Guêpes Soc.* 161. 6.

Hab. Cayenne.

7. Synœca testacea. B.M.

Synœca testacea, *Sauss. Mon. Guêpes Soc.* 162. 7.

Hab. Brazil (Para).

Genus 10. POLYBIA.

Vespa, pt., *Oliv. Encycl. Méth.* vi. 675 (1791).
Polistes, pt., *Fabr. Syst. Piez.* 269 (1804).
Rhopalidia, pt., *St. Farg. Hym.* i. 539 (1836).
Myrapetra, *White, Ann. & Mag. Nat. Hist.* vii. 320 (1841).
Polybia, *Sauss. Mon. Guêpes Soc.* 163 (1853).

1. Polybia apicipennis.

Polistes apicipennis, *Spin. Voy. Ent. Ghil.* 59. 55.
Polybia apicipennis, *Sauss. Mon. Guêpes Soc.* 166. 1. t. 18. f. 6.

Hab. Para.

2. Polybia Picteti.

Polybia Picteti, *Sauss. Mon. Guêpes Soc.* 168. 2. t. 21. f. 2.

Hab. Columbia.

3. Polybia sedula. B.M.

Polybia sedula, *Sauss. Mon. Guêpes Soc.* 169. 3. t. 21. f. 3. & f. 6 (the nest).

Hab. Bahia.

4. Polybia minutissima.

Polybia minutissima, *Sauss. Mon. Guêpes Soc.* 170. 4.

Hab. South America.

5. Polybia laboriosa.

Polybia laboriosa, *Sauss. Mon. Guêpes Soc.* 171. 5.

Hab. Mexico.

6. Polybia Sylveiræ. B.M.

Polybia Sylveiræ, *Sauss. Mon. Guêpes Soc.* 171. 6. t. 22. f. 2.

Hab. Brazil (Sylveira).

7. Polybia bifasciata.

Polybia bifasciata, *Sauss. Mon. Guêpes Soc.* 172. 7. t. 22. f. 3.

Hab. Brazil.

8. Polybia quadricincta. B.M.

Polybia quadricincta, *Sauss. Mon. Guêpes Soc.* 173. 8.

Hab. South America.

9. Polybia exigua.

Polybia exigua, *Sauss. Mon. Guêpes Soc.* 173. 9. t. 22. f. 1.

Hab. Brazil.

10. Polybia liliacea. B.M.

Polistes liliacea, *Fabr. Syst. Piez.* 271. 10.
Polybia liliacea, *St. Farg. Hym.* i. 533. 1.
Sauss. Mon. Guêpes Soc. 174. 10. t. 22. f. 7.

Hab. Cayenne.

11. Polybia sulcata.

Polybia sulcata, *Sauss. Mon. Guêpes Soc.* 175. 11. t. 22. f. 4.

Hab. Brazil.

12. Polybia Jurinei. B.M.

Polybia Jurinei, *Sauss. Mon. Guêpes Soc.* 176. 12. t. 22. f. 5.

Hab. Brazil.

13. Polybia dimidiata. B.M.

Vespa dimidiata, *Oliv. Encycl. Méth.* vi. 675. 28.
Polybia dimidiata, *Sauss. Mon. Guêpes Soc.* 177. 13.

Hab. Cayenne.

14. Polybia socialis.

Polybia socialis, *Sauss. Mon. Guêpes Soc.* 177. 14. t. 24. f. 1.

Hab. Brazil.

15. Polybia aurichalcea. B.M.

Polybia aurichalcea, *Sauss. Mon. Guêpes Soc.* 178. 15.

Hab. Brazil.

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16. Polybia chrysothorax.

Vespa chrysothorax, *Weber, Obs. Ent.* 103. 9.
Polistes aurulenta, *Fabr. Syst. Piez.* 275. 31.
Polybia chrysothorax, *Sauss. Mon. Guêpes Soc.* 178. 16. t. 24. f. 3.

Hab. Cayenne; Brazil.

17. Polybia sericea. B.M.

Vespa sericea, *Sauss. Oliv. Encycl. Méth. Ins.* 675. 29.
Rhopalidia rufithorax, *St. Farg. Hym.* i. 539. 1.
Polybia sericea, *Sauss. Mon. Guêpes Soc.* 179. 17. t. 24. f. 4.

Hab. Brazil (Para); Cayenne.

18. Polybia lugubris. B.M.

Polybia lugubris, *Sauss. Mon. Guêpes Soc.* 180. 18. t. 24. f. 2.

Hab. Guiana.

19. Polybia rejecta. B.M.

Polybia rejecta, *Sauss. Mon. Guêpes Soc.* 180. 19. t. 22. f. 5.

Hab. Cayenne.

20. Polybia atra. B.M.

Vespa atra, *Oliv. Encycl. Méth. Ins.* vi. 674. 20.
Polistes ignobilis, *Halid. Trans. Linn. Soc.* xvii. no. 28. t. 24. f. 5.
Polybia atra, *Sauss. Mon. Guêpes Soc.* 181. 20. t. 24. f. 5.

Hab. Brazil.

21. Polybia fasciata. B.M.

Polistes fasciata, *St. Farg. Hym.* i. 534. 2 (not the synonym).
Polybia fasciata, *Sauss. Mon. Guêpes Soc.* 182. 21. t. 24. f. 6.

Hab. Panama.

22. Polybia flavicans. B.M.

Polistes flavicans, *Fabr. Syst. Piez.* 276. 33.
Polistes testacea, *Fabr. Syst. Piez.* 276. 34.
Polybia testacea, *Sauss. Mon. Guêpes Soc.* 183. 22. t. 23. f. 1.

Hab. South America.

23. Polybia angulicollis. B.M.

Polybia angulicollis, *Spin. Voy. Ent. Ghil.* 61.
Sauss. Mon. Guêpes Soc. 184. 23. 54. t. 23. f. 3.

Hab. Para.

24. Polybia angulata. B.M.

Polistes angulata, *Fabr. Syst. Piez.* 185. 24.
Polybia angulata, *Sauss. Mon. Guêpes Soc.* 185. 24.

Hab. Brazil.

25. Polybia Paraensis. B.M.

Polistes Paraensis, *Spin. Voy. Ent. Ghil.* no. 57.
Polybia Paraensis, *Sauss. Mon. Guêpes Soc.* 185. 25. t. 23. f. 2.

Hab. Para.

26. Polybia phthisica.

Vespa phthisica, *Fabr. Ent. Syst.* ii. 281. 97.
Vespa Cajennensis, *Fabr. Ent. Syst. Supp.* 265. 103.
Coqueb. Illustr. Icon. Ins. 62. t. 15. f. 3.
Vespa ochrosticta, *Weber, Obs. Entom.* 104. 10.
Vespa fasciata, *Oliv. Encycl. Méth.* vi. 676. 35.
Polistes Cajennensis, *Fabr. Syst. Piez.* 280. 54.
Polistes hectica, *Fabr. Syst. Piez.* 278. 43.
Polistes fasciata, *Oliv. Encycl. Méth.* x. 172. 4.
Polistes fulvo-fasciata, *Latr. Gen. des Crust. et Ins.* iv. 142.
Polybia phthisica, *Sauss. Mon. Guêpes Soc.* 186. 26. t. 23. f. 7, 8.
Réaum. Mém. Ins. vi. 207. t. 14. f. 8.
De Geer, Ins. iii. 581. t. 29. f. 8.

Hab. Cayenne; Brazil; St. Thomas.

27. Polybia multipicta.

Polistes multipictus, *Halid. Trans. Linn. Soc. Lond.* xvii. 322. 29.
Polybia multipicta, *Sauss. Mon. Guêpes Soc.* 188. 27.

Hab. Brazil (St. Paul).

28. Polybia pallipes.

Vespa pallipes, *Oliv. Encycl. Méth.* vi. 675. 30.
Rhopalidia pallens, *St. Farg. Hym.* i. 539. 2.
Polybia pallipes, *Sauss. Mon. Guêpes Soc.* 189. 28. t. 25. f. 2.

Hab. Brazil; Cayenne.

29. Polybia vicina.

Polybia vicina, *Sauss. Mon. Guêpes Soc.* 189. 29. t. 24. f. 7.

Hab. Brazil.

30. Polybia anceps. B.M.

Polybia anceps, *Sauss. Mon. Guêpes Soc.* 190. 30.

Hab. Brazil.

31. Polybia xanthopus.

Polybia xanthopus, *Sauss. Mon. Guêpes Soc.* 190. 31.

Hab. Mexico.

32. Polybia constructor.

Polybia constructor, *Sauss. Mon. Guêpes Soc.* 191. 32. t. 23. f. 6.

Hab. South America.

33. Polybia scutellaris. B.M.

Myrapetra scutellaris, *White, Ann. & Mag. Nat. Hist.* vii. 315. t. 4. f. 4–7.

Polybia scutellaris, *Sauss. Mon. Guêpes Soc.* 192. 33. t. 23. f. 4.

Hab. Brazil.

34. Polybia pygmæa, B.M.

Vespa pygmæa, *Fabr. Ent. Syst.* ii. 283. 102.

Polistes pygmæa, *Fabr. Syst. Piez.* 280. 53.

Polybia pygmea, *Sauss. Mon. Guêpes Soc.* 193. 34. t. 23. f. 5.

Hab. Cayenne.

35. Polybia occidentalis. B.M.

Vespa occidentalis, *Oliv. Encycl. Méth.* vi. 675. 31.

Myraptera elegans, *Curtis, Trans. Linn. Soc. Lond.* xix. 257. t. 31. f. 8, & 9 (the nest).

Polybia occidentalis, *Sauss. Mon. Guêpes Soc.* 194. 35.

Hab. Brazil.

36. Polybia pallidi-pectus. B.M.

Male. Length 5½ lines.—Black: the clypeus, face as high as the insertion of the antennæ, the scape in front, the mandibles and outer orbit of the eyes, sulphur-yellow; the flagellum beneath orange. Thorax: a narrow line on the anterior margin of the prothorax, another on its posterior margin, a similar narrow line at the base of the scutellum and post-scutellum, and also two lines running from the scutellum to the base of the posterior wings, yellow; two oblique lines at the base of the

metathorax, the pectus, the coxæ and femora in front, yellow; the tibiæ and tarsi ferruginous and more or less fuscous above; the wings hyaline, the anterior margins of the superior pair yellowish, with a fuscous cloud in the marginal cell, the nervures ferruginous. Abdomen: the petiole elongate, with its apical margin as well as that of the following segment with a yellow fascia; beneath, the abdomen is more or less ferruginous in the middle, the apical margin of all the segments yellow.

Hab. Mexico.

This is probably the male of *Polybia pediculata*.

37. Polybia infernalis.

Polybia infernalis, *Sauss. Mon. Guêpes Soc.* 195. 36. t. 25. f. 3.

Hab. Para.

38. Polybia œcodoma.

Polybia œcodoma, *Sauss. Mon. Guêpes Soc.* 195. 37. t. 25. f. 7.

Hab. Brazil (Bahia).

39. Polybia fastidiosuscula. B.M.

Polybia fastidiosuscula, *Sauss. Mon. Guêpes Soc.* 197. 39. t. 25. f. 4.

Hab. Brazil.

40. Polybia carbonaria.

Polybia carbonaria, *Sauss. Mon. Guêpes Soc.* 198. 40. t. 26. f. 5.

Hab. Brazil.

41. Polybia cordata. B.M.

Female. Length 4½ lines.—Black: the clypeus smooth and shining, its anterior margin forming an obtuse angle. The posterior margin of the prothorax, a connected oblique stripe beneath the wings, the posterior margin of the tegulæ, a minute spot at the lateral angles of the scutellum and the post-scutellum, yellow; the wings hyaline and iridescent, with a dark fuscous spot occupying the marginal cell and the apex of the externo-medial cell; the nervures dark towards the base of the wings and pale towards their apex. Abdomen heart-shaped; the first segment with a narrow yellow fascia on its apical margin, the following segments with a broad fascia; the fasciæ slightly notched in the middle and emarginate on each side; the fascia on the second

segment recurved at the sides and united to a large lateral spot at the base; all the fasciæ except that on the basal segment continued beneath.

Hab. Brazil (Amazons). (Coll. H. W. Bates.)

42. Polybia metathoracica. B.M.

Polybia metathoracica, *Sauss. Mon. Guêpes Soc.* 198. 41. t. 25. f. 1.

Hab. Cayenne.

43. Polybia flavitarsis. B.M.

Polybia flavitarsis, *Sauss. Mon. Guêpes Soc.* 199. 42.

Hab. California.

44. Polybia injucunda.

Polybia injucunda, *Sauss. Mon. Guêpes Soc.* 200. 43. t. 25. f. 8.

Hab. Para.

45. Polybia indeterminabilis.

Polybia indeterminabilis, *Sauss. Mon. Guêpes Soc.* 201. 45.

Hab. South America.

46. Polybia Surinamensis.

Polybia Surinamensis, *Sauss. Mon. Guêpes Soc.* 200. 44.

Hab. Surinam; Brazil.

47. Polybia parvula.

Polistes parvula, *Fabr. Syst. Piez.* 280. 55.
Polybia parvula, *Sauss. Mon. Guêpes Soc.* 196. 38.

Hab. Mexico.

48. Polybia Cubensis. B.M.

Polybia Cubensis, *Sauss. Mon. Guêpes Soc.* 202. 46. t. 25. f. 5, 6.

Hab. Cuba.

49. Polybia Mexicana.

Polybia Mexicana, *Sauss. Mon. Guêpes Soc.* 203. 47. t. 26. f. 6.

Hab. Mexico.

50. Polybia rufidens.

Polybia rufidens, *Sauss. Mon. Guêpes Soc.* 204. 48.

Hab. Cayenne.

51. Polybia rufigastra.

Polybia rufigastra, *Sauss. Mon. Guêpes Soc.* 204. 49.

Hab. America.

52. Polybia pediculata.

Polybia pediculata, *Sauss. Mon. Guêpes Soc.* 205. 50. t. 26. f. 7.

Hab. Brazil.

53. Polybia filiformis.

Polybia filiformis, *Sauss. Mon. Guêpes Soc.* 206. 51. t. 26. f. 8.

Hab. Brazil.

54. Polybia albo-picta.

Female. Length 9 mill.—Black: the clypeus angular in front and of a yellowish white, a spot above the clypeus and a broad stripe at the inner orbit of the eyes of the same colour; a white line behind the eyes. The posterior border of the prothorax, the tegulæ, a line beneath the wings, the scutellum and post-scutellum with a minute spot on each side of both, and a large spot on each side of the metathorax, white; the wings fusco-hyaline, the superior pair with a fuscous stain along their anterior margin, which entirely occupies the marginal cell; the apical joints of the tarsi fusco-ferruginous. Abdomen: the apical margin of the basal petiolated segment with a broad white fascia; the apical margins of the second and three following segments with a white border, the inner margin of which is more or less irregular.

Hab. Brazil. (Coll. W. Swainson, Esq.)

55. Polybia bicolor. B.M.

Female. Length 10 mill.—Head and thorax black; abdomen of a reddish brown; the clypeus produced into an obtuse point anteriorly, with an impressed line at the apex; the tips of the mandibles ferruginous. Thorax elongate-ovate, smooth and slightly shining above; the posterior margin of the prothorax and the basal margin of the scutellum with a narrow yellow line;

the wings hyaline, with a ferruginous tinge on the anterior margin of the superior pair; a dark fuscous cloud occupying the marginal cell and extending to the apex of the wing; the nervures ferruginous, becoming fuscous towards the apex of the wings. Abdomen: the petiolated basal segment rather darker than the following segments, its apical margin with a narrow yellow border; the following segments have a narrow pale fascia on their apical margins, beneath, but on the upper surface the fasciæ are scarcely distinguishable.

Hab. Brazil (Villa Nova). (Coll. H. W. Bates.)

56. POLYBIA DILIGENS. B.M.

Female. Length 6 mill.—Black, decorated with yellowish-white markings: the clypeus, sides of the face, two united spots above the insertion of the antennæ, and a narrow line at the outer orbits of the eyes, yellow; the clypeus with a black stripe down the middle, not extending to the apical margin; the mandibles, scape, and flagellum beneath, fulvous. Thorax: a narrow line on the anterior and posterior margins of the prothorax, three oblique spots beneath the wings, the anterior and intermediate coxæ in front, the tegulæ, two longitudinal stripes on the mesothorax, the scutellum, post-scutellum, and a large spot on each side of the metathorax, yellowish-white; a fascia of the same colour on the apical margin of the petiolated segment of the abdomen, another on the apical and basal margin of the second segment, and a fascia on the apical margin of the third segment; the legs fusco-ferruginous, with the tarsi palest.

Hab. Brazil (Santarem). (Coll. H. W. Bates.)

57. POLYBIA FLAVIFRONS. B.M.

Female. Length 9 mill.—Black: the face and vertex orange-yellow, with a line at the outer orbit of the eyes and a spot on the mandibles at their base of the same colour; the scape in front and the flagellum beneath, fulvous; a large cordate black spot on the vertex enclosing the stemmata. Thorax: a narrow line on the posterior margin of the prothorax, an oblique spot beneath the wings, the tegulæ and a narrow epaulet passing over them to the scutellum, a transverse spot before the latter emitting two narrow lines which terminate before the anterior margin of the mesothorax, the scutellum, post-scutellum, and a spot on each side of the metathorax, yellow; the anterior coxæ yellow in front; the legs fusco-ferruginous, palest in front; the wings subhyaline, with a narrow fuscous cloud along the anterior margin of the superior pair. Abdomen: the apical margins of

the segments with broad yellow fasciæ, which are slightly notched in the middle and waved on each side, that on the second segment running upwards laterally; beneath, the segments have a narrower border.

Hab. Venezuela (Guayaquil).

58. Polybia Indica. B.M.

Polybia Indica, *Sauss. Mon. Guêpes Soc.* 207. 52. t. 26. f. 3.

Hab. China.

59. Polybia orientalis. B.M.

Polybia orientalis, *Sauss. Mon. Guêpes Soc.* 208. 53. t. 26. f. 2.

Hab. China.

60. Polybia tabida.

Vespa tabida, *Fabr. Spec. Ins.* i. 468. 62; *Mant. Ins.* i. 293. 76; *Ent. Syst.* ii. 281. 96.
Oliv. Encycl. Méth. vi. 673. 18.
Polistes tabida, *Fabr. Syst. Piez.* 278. 40.
Polybia tabida, *Sauss. Mon. Guêpes Soc.* 209. 54. t. 26. f. 4.

Hab. Africa.

Genus 11. TATUA.

Vespa, pt., *Fabr. Ent. Syst. Supp.* 264 (1798).
Epipona, pt., *Latr. Gen. des Crust. et Ins.* iv. 141 (1804).
Polistes, pt., *St. Farg. & Serv. Encycl. Méth.* x. 172 (1825).
Tatua, *Sauss. Mon. Guêpes Soc.* 214 (1853).

1. Tatua morio. B.M.

Vespa morio, *Fabr. Ent. Syst. Supp.* 264. 98.
Epipona tatua, *Latr. Gen. des Crust. et Ins.* iv. 141. 1. t. 14. f. 5.
Cuv. Règ. Anim. v. 339.
St. Farg. Hym. i. 540. 1.
Polistes tatua, *St. Farg. & Serv. Encycl. Méth.* x. 172. 2.
Polistes morio, *Curtis, Trans. Linn. Soc. Lond.* xix. 258. 6.
Tatua morio, *Sauss. Mon. Guêpes Soc.* 214. 1. t. 31. f. 1.

Hab. Brazil.

2. Tatua Guerini.

Tatua Guerini, *Sauss. Mon. Guêpes Soc.* 215. 2.

Hab. Mexico.

Genus 12. CHARTERGUS.

Vespa, pt., *Oliv. Encycl. Méth.* vi. (1791).
Epipona, pt., *Latr. Gen. des Crust. et Ins.* (1804).
Polistes, pt., *St. Farg. & Serv. Encycl. Méth.* x. 172 (1825).
Chartergus, *St. Farg. Hym.* i. 546 (1836).

1. CHARTERGUS APICALIS. B.M.

Vespa apicalis, *Fabr. Syst. Piez.* 260. 38.
Polistes, *Gray, Griff. Anim. Kingd.* xv. 575. t. 3. f. 3.
Chartergus ater, *St. Farg. Hym.* i. 546. 1.
Chartergus apicalis, *Sauss. Mon. Guêpes Soc.* 217. 1.

Hab. Bolivia; Brazil; Cayenne; Mexico.

2. CHARTERGUS FULGIDIPENNIS.

Chartergus fulgidipennis, *Sauss. Mon. Guêpes Sol.* 218. 2. t. 31. f. 5.

Hab. Para.

3. CHARTERGUS COLOBOPTERUS.

Vespa colobopterus, *Weber, Obs. Entom.* 102. 5.
Seba, Locupl. Rer. Thes. iv. t. 98.
Chartergus colobopterus, *Sauss. Mon. Guêpes Soc.* 248. 3.

Hab. Columbia.

4. CHARTERGUS SMITHII.

Chartergus Smithii, *Sauss. Mon. Guêpes Soc.* 219. 4.

Hab. Brazil. (Coll. F. Smith.)

5. CHARTERGUS CHARTARIUS.

Vespa chartaria, *Oliv. Encycl. Méth.* vi. 687.
Vespa artifex Surinamensis, *Christ. Hym.* 226. t. 20.
Vespa nidulans, *Fabr. Ent. Syst.* ii. 271. 66; *Syst. Piez.* p. 266. 68.
Coqueb. Illustr. Icon. t. 6. f. 3.
Vespa chartifex, *Vallot, Concord. Syst.* p. 171.
Epipona nidulans, *Latr. Gen. des Crust. et Ins.* i. t. 14. f. 6.
Cuv. Règn. Anim. v. 339.
Epipona chartaria, *Latr. Hist. Crust. et Ins.* xiii. 102. t. 14. f. 6, 7.
Polistes nidulans, *St. Farg. & Serv. Encycl. Méth.* x. 172. 5.
Guér. Icon. Règ. Anim. t. 72. f. 7.
Epipona chartaria, *Curtis, Trans. Linn. Soc. Lond.* xix. 258. 4.
Réaum. Ins. vi. t. 20. f. 1–4, t. 21. f. 1, t. 22. f. 23, t. 24?

Hab. South America (Brazil, Cayenne, British Guiana); Mexico.

6. CHARTERGUS GLOBIVENTRIS.

Chartergus globiventris, *Sauss. Mon. Guêpes Soc.* 221. 6. t. 31. f. 3.

Hab. Brazil.

7. CHARTERGUS ATER.

Chartergus ater, *Sauss. Mon. Guêpes Soc.* 222. 7.

Hab. Brazil.

8. CHARTERGUS ZONATUS.

Chartergus zonatus, *Spin. Mem. Accad. Torino*, n. s. xiii. 73. 54. *Sauss. Mon. Guêpes Soc.* 222. 8.

Hab. Brazil (Para).

9. CHARTERGUS COMPRESSUS.

Chartergus compressus, *Sauss. Mon. Guêpes Soc.* 223. 9. t. 31. f. 6

Hab. Brazil (the Amazons).

10. CHARTERGUS EMORTUALIS. B.M.

Chartergus emortualis, *Sauss. Guérin's Rev. et Mag. Zool.* (1855) p. 374.

Hab. Brazil (Santarem).

11. CHARTERGUS LUCTUOSUS. B.M.

Female. Length 5½ lines.—Black: the clypeus with a curved line at its anterior margin in the middle, a large spot on the mandibles, an ovate spot on the lower part of the cheeks, a short stripe behind the eyes, a line at their inner orbits above the clypeus, a stripe on the scape in front and two spots between the antennæ, yellow; the flagellum obscurely ferruginous towards its apex beneath. Thorax: the anterior coxæ and tibiæ in front, yellow; the wings hyaline, their nervures fuscous. Abdomen: the first segment with a narrow yellow fascia on its posterior margin.

Hab. Brazil (Santarem). (Coll. H. W. Bates.)

Genus 13. NECTARINA.

Polistes, pt., *Latr. Ann. Sci. Nat.* 1st ser. iv. (1825).
Brachygastra, *Perty, Del. An. Art.* 146 (1817–20).
Nectarina, *Shuck. Cab. Cycl. Hist. Ins.* 181 (1840).
Nectarinia, *Sauss. Mon. Guêpes Soc.* 225 (1853).

1. Nectarina rufiventris. B.M.

Nectarinia rufiventris, *Sauss. Mon. Guêpes Soc.* 226. 1.

Hab. Brazil (Para).

2. Nectarina scutellata. B.M.

Brachygastra scutellata, *Spin. Mem. Accad. Torino,* new ser. xiii. no. 55. p. 74.
Nectarinia scutellata, *Sauss. Mon. Guêpes Soc.* 227. 2.

Hab. Brazil (Para).

3. Nectarina bilineolata.

Brachygastra bilineolata, *Spin. Ann. Soc. Ent. Fr.* x. p. 126 (1841).
Nectarinia bilineolata, *Sauss. Mon. Guêpes Soc.* 228. 3. t. 34. f. 2.

Hab. Cayenne.

4. Nectarina Smithii. B.M.

Nectarinia Smithii, *Sauss. Mon. Guêpes Soc.* 229. 4. t. 31. f. 8.

Hab. Brazil.

5. Nectarina binotata.

Nectarinia binotata, *Sauss. Mon. Guêpes Soc.* 230. 5.

Hab. Cayenne.

6. Nectarina analis. B.M.

Brachygastra analis, *Perty, Del. An. Art.* t. 28.
Nectarina analis, *Shuck. Cab. Cycl. Hist. Ins.* p. 183 (1840).
Guér. Icon. Règ. Anim. Ins. 148. t. 28. f. 6.
Nectarinia analis, *Sauss. Mon. Guêpes Soc.* 230. 6.

Hab. Brazil.

7. Nectarina velutina.

Brachygastra velutina, *Spin. Ann. Soc. Ent. Fr.* x. 126. 77. t. 3. no. 5 ♀ (1841).
Nectarinia velutina, *Sauss. Mon. Guêpes Soc.* 231. 7.

Hab. Brazil; Cayenne.

8. Nectarina Lecheguana.

Polistes lecheguana, *Latr. Ann. Sci. Nat.* 1st ser. iv. 335.
Nectarinia lecheguana, *Sauss. Mon. Guêpes Soc.* 232. 8. t. 34. f. 3.

Hab. Brazil.

9. Nectarina mellifica.

Polistes mellifica, *Say, Bost. Journ. Nat. Hist.* i. p. 390.
Nectarinia mellifica, *Sauss. Mon. Guêpes Soc.* 233. 9.

Hab. Brazil.

10. Nectarina Augusti.

Nectarinia Augusti, *Sauss. Mon. Guêpes Soc.* 233. 10.

Hab. Mexico.

11. Nectarina aurulenta.

Brachygastra aurulenta, *Erichs. Fauna und Flora Brit. Guiana*, iii. 590.

Hab. British Guiana.

EXPLANATION OF PLATES.

PLATE I.

Fig.
1. *Paragia pictifrons.*
2. *Stenoglossa Odyneroides.*
3. *Gayella Mutilloides.*
4. *Raphiglossa Natalensis.*
5. *Smithia Natalensis.*

PLATE II.

Fig.
1. *Zethus lobulatus.*
2. *Discoelius insignis.*
3. *Zethus* (*Calligaster*) *gigas.*
4. *Eumenes multipictus.*
5. *Pachymenes chrysothorax.*

PLATE III.

Fig.
1. *Rhynchium Grayi.*
2. *Monobia angulosa.*
3. *Montezumia Indica.*
4. *Pterochilus insignis.*
5. *Leptochilus denticulatus.*

PLATE IV.

Fig.
1. *Alastor flavipes.*
2. *Belonogaster Guineensis.*
3. *Mischocyttarus Smithii.*
4. *Ischnogaster micans.*

PLATE V.

Fig.
1. *Polybia flavitarsis.*
2. *Nectarina Smithii.*
3. *Synœca testacea.*
4. *Vespa mandarinia.*

PLATE VI.

Fig.
1. Nest of *Eumenes tinctor.* Constructed of mud and suspended in stems of grass.
2. Nest of *Synagris mirabilis.* Constructed of sandy loam.
3. Nest of *Synagris calida.* Constructed of sandy loam.
4. Nest of *Pelopœus chalybeus.* Constructed of the excrement of cows or horses.
5. Nest of *Mischocyttarus labiatus.* Constructed of the scrapings of wood.
6. Nest of *Icaria guttatipennis.* Constructed of the scrapings of wood.
7. Nest of a species of *Eumenes.* Constructed of mud and attached to a reed.

List of the typical specimens of *Vespidæ* in the Linnæan Collection, preserved in the Museum of the Linnæan Society referred to the genera in which they appear in this Catalogue.

Vespa coarctata.
—— calida.
—— cornuta.
—— parietum.
—— muraria.
—— spinipes.
—— bifasciata.
—— Carolina.
—— orientalis.
—— gallica.
—— biglumis.
—— maculata.
—— cincta.
—— affinis.
—— Crabro.
—— vulgaris.
—— rufa.

Eumenes coarctata.
Synagris calida.
—— cornuta.
Odynerus parietum.
—— murarius.
—— spinipes.
—— bifasciatus.
Polistes Carolina.
—— orientalis.
—— gallicus.
—— biglumis.
Vespa maculata.
—— cincta.
—— affinis.
—— Crabro.
—— vulgaris.
—— rufa.

List of the typical specimens of *Vespidæ* in the Banksian Collection, preserved in the Museum of the Linnæan Society of London, described by Fabricius in the *Systema Piezatorum*; referred to the genera in which they appear in this Catalogue.

Vespa cincta,	*Syst. Piez.*	p.	253.	1.	Vespa cincta.
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—— analis,	,,	,,	254.	6.	Odynerus analis.
—— æstuans,	,,	,,	258.	24.	Synagris æstuans.
—— hæmorrhoidalis,	,,	,,	259.	28.	Rhynchium hæmorrhoidale.
—— albifrons,	,,	,,	259.	29.	Alastor albifrons.
—— tecta,	,,	,,	261.	40.	Odynerus tectus.
—— bicincta,	,,	,,	265.	64.	—— bicinctus.
—— rufipes,	,,	,,	259.	32.	Rhynchium rufipes.
Polistes lanio,	,,	,,	269.	1.	Polistes Canadensis.
—— Schach,	,,	,,	272.	2.	—— Schach.
—— humilis,	,,	,,	270.	5.	—— humilis.
—— tepidus,	,,	,,	271.	7.	—— tepidus.
—— Macaensis,	,,	,,	272.	12.	—— Macaensis.
—— carnifex,	,,	,,	272.	13.	—— carnifex.
—— marginalis,	,,	,,	272.	17.	—— marginalis.
—— variabilis,	,,	,,	273.	20.	—— variabilis.
—— lateralis,	,,	,,	273.	22.	Rhynchium laterale.
—— cinereus,					Raphigaster junceus.
—— macilentus,					—— rufipennis.
—— cyanea,					Syncœca cyanea.
Eumenes grisea,					Raphigaster grisea.
—— campaniformis,					Eumenes campaniformis.
—— arcuata,					—— arcuata.
—— petiolata,					—— petiolata.

MUSÉUM D'HISTOIRE NATURELLE
BIBLIOTHÈQUE
DU LABORATOIRE
D'ENTOMOLOGIE

Tab 1.

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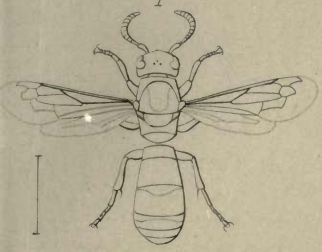

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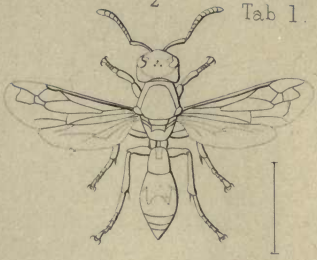

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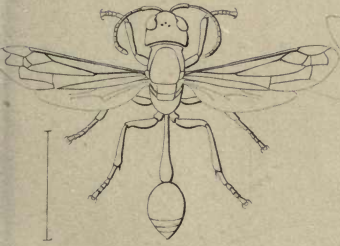

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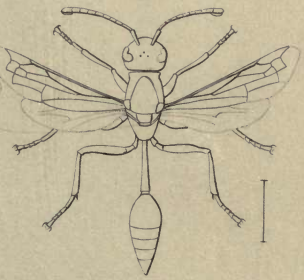

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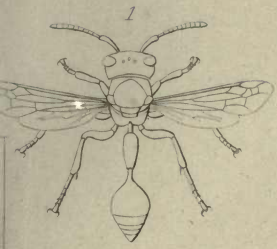
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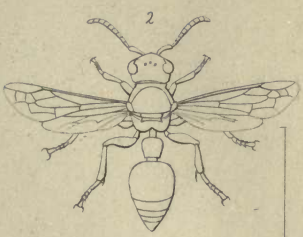
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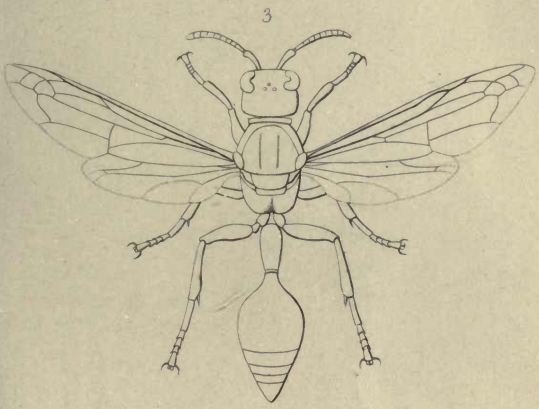
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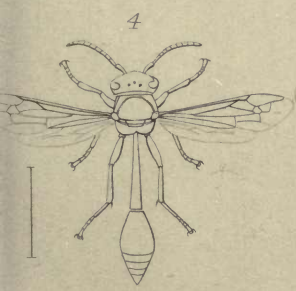
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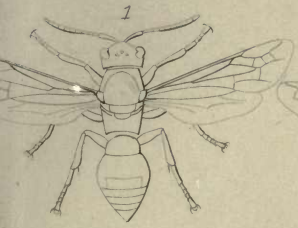
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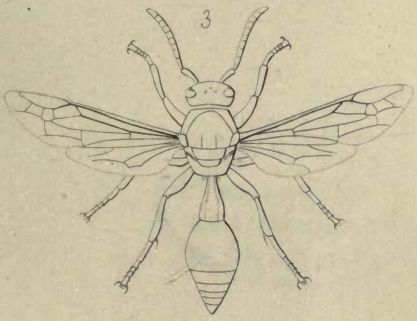
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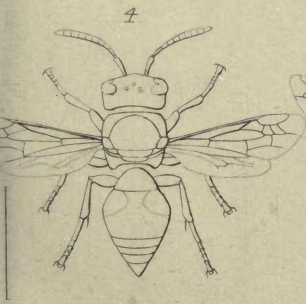
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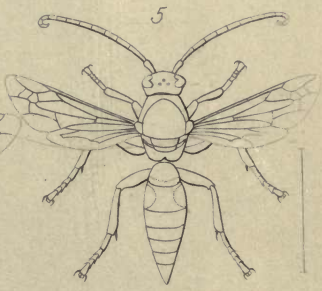
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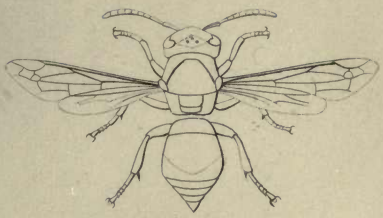
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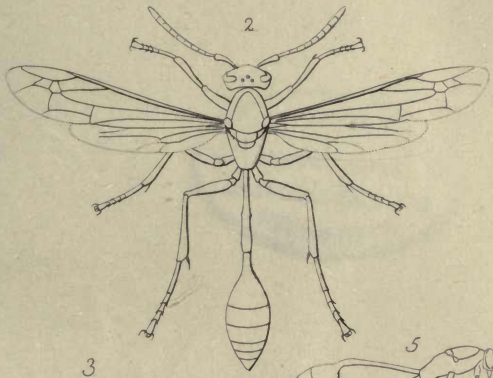
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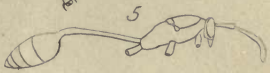
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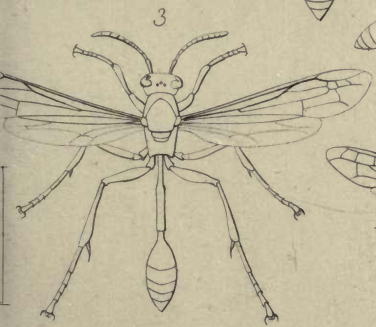
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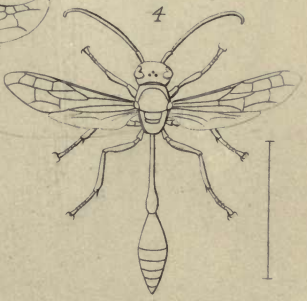
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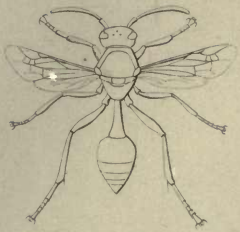

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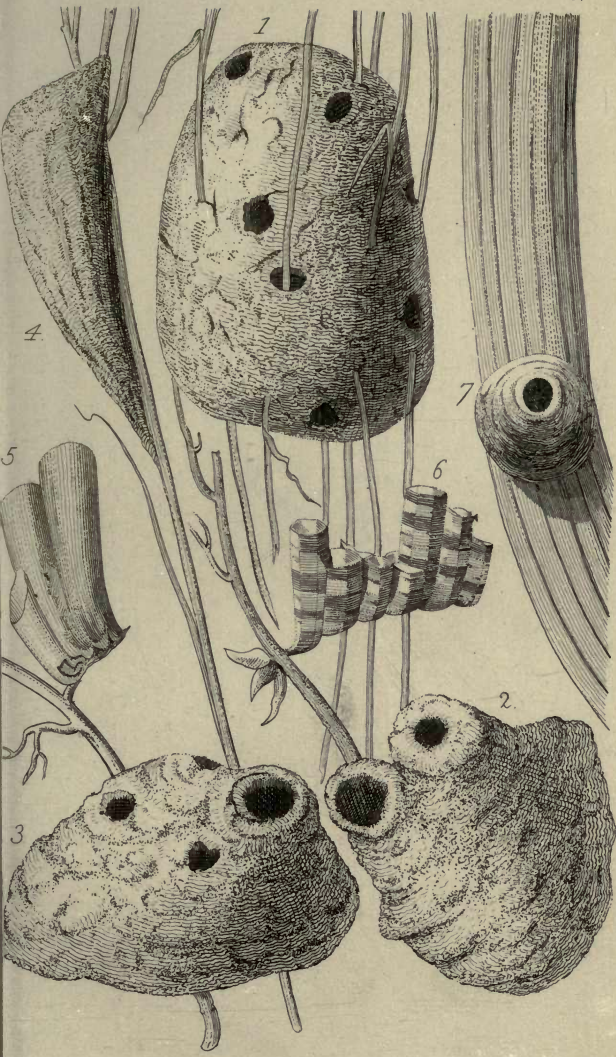
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